

JOSEPH PIZZORNO, ND: ADVANCING THE FIELD OF NATURAL MEDICINE

Interview by Karolyn A. Gazella and Suzanne Snyder • Photography by Dana Neely

Joseph E. Pizzorno Jr, ND, was appointed by President Clinton in December 2000 to the White House Commission on Complementary and Alternative Medicine Policy and by President George W. Bush's administration to the Medicare Coverage Advisory Committee in November 2002. Dr Pizzorno is one of the world's leading authorities on science-based natural medicine. A naturopathic physician, educator, researcher, and spokesperson, Dr Pizzorno is founding president of Bastyr University, Kenmore, Wash. Under his leadership, Bastyr became the first fully accredited, multidisciplinary university of natural medicine and the first National Institutes of Health-funded center for alternative medicine research. Dr Pizzorno authored Total Wellness and co-authored the internationally acclaimed Textbook of Natural Medicine. He also co-authored the Handbook of Natural Medicine, the best-selling Encyclopedia of Natural Medicine, Natural Medicine for the Prevention and Treatment of Cancer, and the recently released Encyclopedia of Healing Foods. Since 2002, Dr Pizzorno has served as the editor-in-chief of Integrative Medicine: A Clinician's Journal.

Alternative Therapies (AT): Did you always want to be a doctor, and why did you choose chemistry as an area of emphasis?

Joseph Pizzorno, ND: I've always had an interest in science and in how things work. When I was about 10 years old, I was the neighborhood handyman. If anyone had a problem with their electrical system, plumbing, or whatever, I was the person they called to come fix it. That's probably because my dad and mom built our house. From the time I was about 5 years old, I had a hammer in my hand and was taught all kinds of construction skills. So, from a very early age I had a lot of interest in how things are made and how they work.

When it came time for college, I was evaluating which college I wanted to attend. Chemistry turned out to be very similar to my childhood interest because it is about how molecules are made. Since molecules are fundamental to our lives, it seemed like a logical direction for me to go in.

I come from a large family. I am the oldest of 8 children. My mother stayed home to care for us, and my father was in construc-

tion. He basically started out as a carpenter and worked himself up to being a senior executive in a large company called, at the time, Thrifty Drug Stores. He was responsible for building all the new stores. He was a very capable man who pulled himself up by his bootstraps. A first-generation Italian immigrant, he grew up in a poor part of Los Angeles and through hard work went from gang-populated dirt streets to the middle class.

Having a large family was a huge challenge for my parents, but they really wanted to have lots of kids.

AT: Did you choose naturopathic medicine early on in your professional career, or did that evolve over time?

Dr Pizzorno: It was actually kind of an accident. After I graduated with a degree in chemistry from Harvey Mudd (College, Claremont, Calif), I went off to graduate school at Cornell University. At that time, I was in the materials science engineering PhD program. As it turns out, I didn't like the graduate program I was involved in, so I decided to leave graduate school. This was during the height of the Vietnam War. I viewed the work I was doing as contributing to the war effort, and that was not something I wanted to do.

I decided I was more interested in health than in war, so I got involved in medical research at the University of Washington School of Medicine (Seattle). At that point I was thinking that my career path was to do research and also pursue a doctorate.

When I left Cornell, I also became a vegetarian, more for philosophical than nutritional reasons, but I saw my body change as a result of my new lifestyle. As I was witnessing the various changes in my body, I was doing medical research, and I asked one of the medical doctors I was working with what these changes in my body meant. I was told there were errors in my observations because diet does not have an effect on us. Of course, today we know that is ridiculous. But remember, back in 1970, it was the medical dogma of the time. It was simple: "Diet is not important." But I knew it was important. I could see it was important in my own life.

As I worked in research, an event occurred that changed my life, though I didn't realize it at the time. The woman who mar-

Joseph Pizzorno, ND, shown here on the grounds of Bastyr University, Kenmore, Wash, believes that individualized health manuals can revolutionize our healthcare system.

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ried by roommate from Harvey Mudd College had suffered from rheumatoid arthritis since she was a teenager. It had become a serious problem for her. She was cured of her arthritis by someone called a naturopathic doctor. To me, that was really quite strange because rheumatoid arthritis was an incurable disease. I knew it was an incurable because I knew a lot of other researchers across the country who were trying to find a cure for it. I also didn't realize there were other kinds of doctors other than medical doctors. I was just like everybody else, I guess, in my generation. I thought the only kind of doctors were medical doctors, so I didn't even know there were other options for people who wanted to study medicine.

I thought this case was interesting. Being of a scientific bent, I decided to check out this naturopathic doctor, Dr Richard Stober, since deceased. I asked him, "What did you do for my friend?" He said, "I just detoxified her liver." I said, "That's weird. What does the liver have to do with her joints—with her knees being swollen?" Then I asked him about the changes I saw in my body after becoming a vegetarian. It was quite an interesting conversation.

He walked over to his bookshelf and pulled out *Guyton's Physiology*. At that time, *Guyton's* was the standard textbook of physiology used in medical schools. He leafed through the index, found the appropriate pages, and then showed me the changes my body went through as a result of my becoming vegetarian. I thought that was really interesting—this naturopathic doctor appeared to understand physiology better than the medical research doctors I was working with. I asked him if I could spend a few days with him.

I spent some time in his office observing him with patients and was really surprised. I saw "miracle case" after "miracle case," meaning patients who were considered medical failures being helped by this doctor. These same "failures" were getting well by using what seemed to be fairly simple procedures: diet, herbs, vitamins, lifestyle changes, and the like. He was helping his patients regain their health. It was at that point that I decided to become a naturopathic doctor. Before then, it never occurred to me to become involved in healthcare. I had wanted to be a medical researcher.

AT: It is interesting how you became connected to this naturopathic doctor and that it led to a major shift in your professional journey.

Dr Pizzorno: What was also amazing was that the last naturopath-

ic medical school in the country just happened to be in Seattle. The National College of Naturopathic Medicine, now in Portland, was then in Seattle. I was able to continue working part-time doing research—because I really liked research—and I was able to enroll full-time in the naturopathic medical school. I went through the educational program and graduated in 1975. I first got involved in natural medicine in 1970, so I have been doing this for more than 35 years now.

After I graduated, National College left the state of Washington. It was then that I approached a few of my friends and said, "You know, this medicine seems to have so much to offer, but there's only one school left. Let's get together and create our own school of naturopathic medicine and do it right." National College was struggling. It hadn't really applied modern science to the naturopathic education. By "do it right," I meant that we should create a science-based curriculum. We wanted to recruit faculty members who had doctorates in their areas—PhDs. And we also wanted to engage in research. We wanted to write modern textbooks. We wanted to do education right. When I

co-founded Bastyr in 1978 and became founding president, my goal was to create science-based natural medicine so that this body of knowledge, which has so much to offer people, could be better accepted by the mainstream. We also wanted to improve natural medicine. We didn't want to just have a naturopathic medical school; we wanted to do it better. When I went to school, I saw the need for improvement. Natural medicine was being kept alive, but it was not as good as it could be. It was not improving or expanding.

AT: That was a massive undertaking for a young man who just received his naturopathic doctorate. Were you just energetic and not aware of everything it would entail?

Dr Pizzorno: Yes, that's exactly right. I had an idea what I wanted to do. When I took on a project, I would just make it happen. Things always managed to work out. I was very fortunate in that I was able to recruit special people who would agree with my viewpoint, my vision for the university and advancement of natural medicine.

When I was in clinical practice after graduating in 1975, my receptionist was a woman who used to be a patient of mine when I

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was a student. She had suffered all her life from serious asthma and eczema. Through natural medicine, I was able to help her quite a bit. I was in private practice for 3 years before starting the school in 1978. My receptionist's mother, who lived on the East coast, was also a patient with severe arthritis. Although I did not see her as often, I was able to help her as well. When I told my receptionist I wanted to start the school, she mentioned this to her mother, who then sent me a check for \$200 and said, "Do it." I started Bastyr with that \$200!

AT: That is amazing. It's interesting that as a young boy, you liked to build, and your dad was a builder, and now as a young man, you were building a university. What was the most challenging thing about starting Bastyr?

Dr Pizzorno: That's an interesting observation. There were a lot of challenges—a long list. There was no body of prospective students. There was no trained faculty. The most current textbook was written the year I was born. There was no money. No foundation would support us. There was no social support because natural medicine was considered quackery. The law in Washington State we practiced under had been passed in 1918, and it was just a terrible law. If you ever saw a story in the news media about anything to do with natural medicine, it was typically about some poor child eating an herb and getting poisoned by it. The media were completely negative about natural medicine. You can't imagine a more hostile environment in which to start a medical school.

There was also a philosophical problem in the natural medicine community. There was almost an antipathy toward science within the natural medicine movement. Science was the bludgeon used by the American Medical Association to supposedly discredit this body of knowledge.

I, of course, had a very strong orientation toward science. My belief was that science was not owned by anybody, that it was a tool to be used by everybody. In fact, I felt it was a tool that had to be used by all professions if they wanted to improve the quality of their patient care.

So it wasn't a surprise to our research department when I told people I wanted to do research not to prove the value and efficacy of our medicine, but to get better, to advance the field. By getting better and improving our clinical outcomes, we would help make this medicine successful.

The only advantage we had was a statement made by Dr John

Bastyr, whom I loved dearly. When I was a third-year naturopathic medical student in 1974, the outlook was very bad for natural medicine. There had actually been a court decision in Washington State that was so restrictive, it said we couldn't even diagnose or treat our patients. We could not diagnose a disease or treat a disease. We could only give patients general health information. During a field trip, I asked Dr Bastyr about this. We were up in the mountains looking at herbal medicines in their natural environment so that we could learn to recognize them. As we were walking the trails, Dr Bastyr would point out an herb and tell us about its medicinal prop-

erties and how to properly prepare it. It was not only educational, it was really a lot of fun. But it was a depressing time for natural medicine because of what had happened with the legal status.

I asked Dr Bastyr if there was a future for this medicine. His inspirational statement kept Bastyr University alive through a lot of challenges: "The truth in our medicine will always win out." That was what we had—the truth of the medicine. And that truth attracted students. It attracted faculty. Later, it attracted researchers, and

later still, it attracted social support in terms of media and funding and everything else needed to make a university successful.

AT: Looking back, do you sometimes say, "Gosh, what was I thinking?"

Dr Pizzorno: Oh, yes. Any rational person who realized what all the obstacles were probably wouldn't have attempted it. You also have to realize that when Bastyr started in 1978, over a period of about 5 years, 3 other schools also started. They all failed. This was not easy to do.

AT: What was the most exciting aspect of starting Bastyr?

Dr Pizzorno: Keeping the medicine alive. It has been exciting to have a very strong commitment to fulfilling the mission statement of Bastyr, which has not changed in almost 30 years. Our mission is to improve the health and well-being of the human community. We had a very strong belief that this body of knowledge has a tremendous ability to relieve human suffering. We felt it was our sacred duty not only to keep the medicine alive, but to enhance it. If you look now at the research documenting the incredible importance of nutrition, diet, lifestyle, environmental toxicity, intestinal dysbiosis,

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etc, to health—these are all the foundation of the healthcare naturopaths have been practicing for more than a century. They are only now becoming proven.

AT: You have left Bastyr as president and you remain with the university as president emeritus. Was the decision to leave difficult, or did you simply know it was time?

Dr Pizzorno: It was a difficult decision to make. At that point, I had spent almost all of my adult life creating Bastyr. I put everything I could into it, including my first marriage. After doing it for 22 years, in the year 2000, I realized I had become a university president. That basically means being a fundraiser and an administrator. I had gotten further and further away from the medicine, which is my true passion.

The year I started the university, I was teaching 14 units a quarter as well as being president. Most of my time was still spent teaching and being involved with the medicine. As the years passed, I got to the point where I was teaching only 1 unit a year rather than 14 units a quarter. My opportunity to be involved with the medicine became very limited.

Although I was able to co-author with Michael Murray, ND, the *Textbook of Natural Medicine*, which gave me some direct involvement with the medicine, most of my time was spent being a university president. That wasn't what I wanted to do with my life.

Bastyr also became a big university, having grown to 1,200 students and 600 employees when I left. My own assessment was that Bastyr needed someone with different skills—somebody who could manage a large organization, who enjoyed fundraising and the other administrative duties. Because that wasn't what I wanted to do, it seemed best for the school and for me to move on. When I left the school in 2000, I felt it was in really good shape—strong reputation, positive financials, growing student body, growing research department, etc. I actually surpassed many of the goals I set out to accomplish. I never thought we would have more than 500 or 600 total students enrolled. I was so pleased when we grew to 1,200 students. I felt it was time for me to go. Leaving when things were positive meant I could continue to maintain a good relationship with the school. If I had made a bunch of mistakes and left when the school was failing, that would not have been the case.

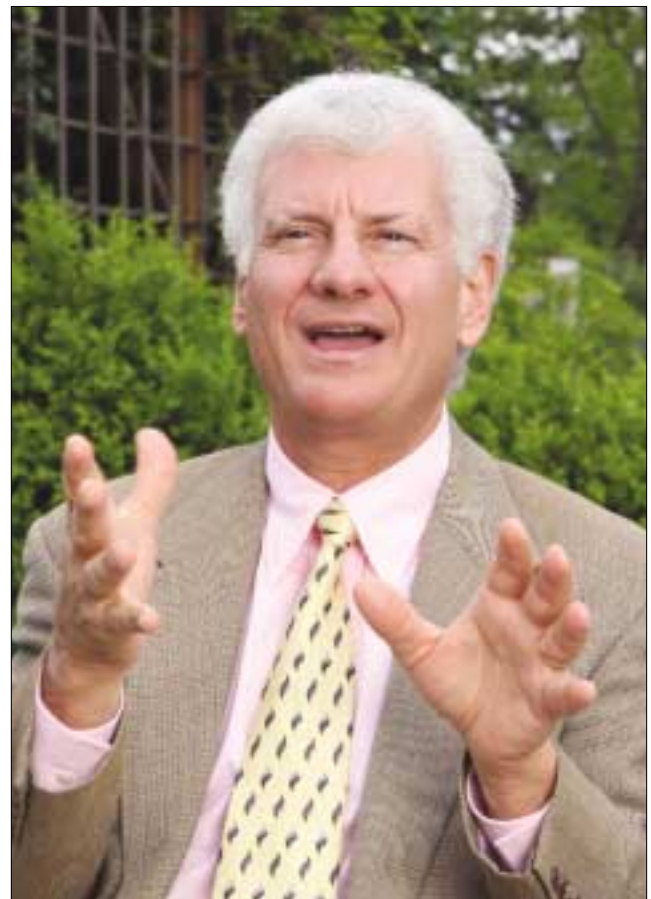
AT: Over the past 3 decades, you have been involved in naturopathic medicine, and you have seen the desire to change the term. What are your views regarding terminology: *complementary and alternative medicine (CAM)*, *naturopathic*, *integrative*?

Dr Pizzorno: I have always disliked the terms *alternative* and *complementary*. Those terms define this medicine by what we are not, rather than by what we are. I really like the phrase *natural medicine*. That is the term I've used most consistently over the years.

CAM has gotten a bit institutionalized, and that is unfortunate. While the term *integrative medicine* conceptually sounds nice, the definitions of it are so diverse nobody knows what it means. Some people think *integrative medicine* means MDs adding some

herbs and vitamins to their practice, whereas others think it is a collaboration between conventional medicine and natural medicine doctors. There are a lot of ways to define *integrative medicine*. For those reasons, I still really like the term *natural medicine* because it more clearly defines what we are and what we believe. *Natural medicine* holds the belief that each person has tremendous ability to heal, and our role as healthcare professionals is to help the body heal itself. That is the term and definition I have been using for 35 years, and the one I still prefer.

The philosophical extremes in medicine have been like a pendulum swinging back and forth over the centuries. On the one side there is the belief of *Hygia*, that the body has a tremendous ability to heal, and the role of the doctor is to understand what's blocking the body from healing and remove that blockage, so the body can heal itself. The other side can be referred to as the *Asclepion* perspective. That belief is that the body makes mistakes, and the role of the doctor is to intervene, take over the body, and do things for the body that the body can't do for itself. Each of those extremes has its strengths and its weaknesses. Unfortunately, in the last 75 years, we've been in the *Asclepion* extreme, which contends that the body is broken; we should give it to the doctor, let the doctor fix it and give it back to us. That works fine in certain circumstances, such as emergencies or accidents. But when it comes to chronic illness and day-to-day health issues, that system does not work. The *Hygia* sys-



tem, which is based on the idea of supporting the body's healing process, does not work well in emergencies or accidents, where there is life-threatening injury or the body is overwhelmed with, for example, infection. Using the least invasive intervention and avoiding therapies that take over the function of the body rather than supporting it—as well as the concept of “first do no harm”—is an ideal approach for chronic health problems. Obviously, if somebody is lying in the street bleeding heavily, his body cannot heal itself and requires the high-tech intervention approach associated with *Asclepion* medicine. We've lost the balance between the two.

AT: At this point in your career, what excites you the most?

Dr Pizzorno: I'm doing 3 things right now. I'm still associated with Bastyr as president emeritus, which means I'm able to continue to support the growth of the university and its important mission.

Second, I am engaged in academic activities. I am editor-in-chief of *Integrative Medicine: A Clinician's Journal*, co-author of the *Textbook of Natural Medicine*, and co-author of the new book, *Encyclopedia of Healing Foods* with Michael Murray and my wife, Lara Pizzorno. I have authored several other books and numerous articles.

The majority of my time, however, is spent on my health software company, SaluGenecists. We are developing artificial intelli-

gence tools that can help both healthcare professionals and healthcare consumers improve health and the quality of healthcare that they practice or receive. I spend most of my time on the conceptual side because it is in many ways closest to the medicine. I have put together a group of very smart people to think deeply about how we can better understand why people get sick and what we can do about it. We are digging very deep—deeper than anybody ever has before. We are looking at these issues very logically. We have to be thorough and rigorous in everything we do because once we program the information into a computer using an artificial intelligence system, we will get information that is only as good as the input data and logical relationships we elicit from the research literature. So far, we have been able to develop insights and innovations practitioners will find very beneficial.

AT: It almost seems as though you'll have a dual legacy. Many will know you as the founding president of Bastyr, and you've been able to influence thousands of lives through that educational process, but now you have the ability to have more of a mass influence. Is that your desire?

Dr Pizzorno: Yes, but I feel this project is consistent with what I've been doing, which is to make a body of knowledge better and more accessible to people. Those people can be students who want to



become healthcare professionals. They can be existing healthcare professionals who want to improve the quality of their practice. Or they can be consumers who want to take control of their health.

Of the 7 books I've written over the years, the *Encyclopedia of Natural Medicine*, which I co-authored with one of my graduates, Michael Murray, has sold over a million copies and has been translated into 6 languages. What I'm doing now is actually the logical progression of my earlier work. It's just one more way to make this body of knowledge better and more accessible. When people ask me what I do, I say I'm a healthcare change agent. And that's what I've been doing for the past 35 years.

AT: What does the future hold for naturopathic medicine?

Dr Pizzorno: When I think in terms of healthcare, I think of not only naturopathic medicine but all of healthcare. The future is still murky. I say that because we have many competing interests; some are committed to the best health for our community, and some have other motivations. We need to fundamentally reconstruct healthcare from its conceptual basis to the institutions that deliver it, how we prioritize research and the regulatory and financial environment.

For example, if you look at pharmacology research, so much of the money is being spent on what is called a gold standard for drugs—that is, those that people will be on for the rest of their lives. It is a highly desirable economic model for pharmaceutical companies. Statin drugs are a perfect example of the gold standard that drug companies are searching for. These drugs are modestly clinically effective, and people will have to use them for the rest of their lives. It's an unending revenue stream. It is also economically unsustainable for our society.

As long as we focus on that kind of a disease treatment system, which dominates our spending and mindset, we will continue to have increasing disease and unsustainable costs because that system does not deal with why people get sick. Genetic research is another prime example. On the one hand, genetic research can lead to more “designer drugs” that people will be on for the rest of their lives. On the other hand, it could lead to a higher quality of understanding why people get sick, what their unique needs are, and how we can help keep them healthy.

Do we want more designer drugs, or do we want truly personalized health manuals? The more we try to help people understand their own unique healthcare needs and develop a system that supports that, the better chance we have of creating a healthcare system that works and that people can afford.

Research can help us individualize our healthcare, especially in the area of prevention. For example, there are about 3 million variations in how enzymes are made in the body. This information can help us understand each individual's enzyme set. Utilizing our understanding of each person's unique physiology, we can determine what diet is best for that person, what foods to avoid, what toxins a person may not be able to detoxify easily, and so on.

In addition, we can determine which enzymes may not be working as well as they should and recommend specific nutrients to help them work properly. Consider the cigarette ads from 50 years

ago showing a guy who is 102 years old saying that he's been smoking all his life and has never developed cancer. That's probably true because he has the right enzymes in his liver to detoxify the cigarette carcinogens. But then there is the 30-year-old who gets lung cancer even though he never smoked, but his parents did. One is able to manage the toxins, and the other is not.

We are utterly unique in the kind of lives we need to live to be healthy. That's what my company is working on right now—developing those individualized health manuals. To me, that's an incredibly effective healthcare system, and that is very exciting.

AT: How do we influence the system to make that shift?

Dr Pizzorno: My friend David Jones, MD, who is president of the Institute for Functional Medicine, was formerly the medical director of an insurance company in Southern Oregon. He found that for the same expenditure of time, doctors got paid 3 times as much to diagnose and treat disease than they did to provide preventive care. Until we value health promotion as much as high-tech intervention, we will always have a system that is focused on high-tech intervention because human nature is to do what we get paid most for.

We have to work with our federal and state representatives to improve support for public health and wellness programs. As we all know, people are living longer. However, 75% of the increase in longevity is due to public health, not medical intervention. Let's pay attention to public health. Public health is more than contagion control, which is important. But public health should also include other things we can do to improve the health of our community. The support of iodized salt had a huge impact on getting rid of goiter, for example. There are many other areas in which public health can be involved in the food supply and environmental toxin exposure. Only 2% of the healthcare budget goes to public health. The rest goes to medical intervention.

We also need to support ways to increase financial accountability, such as health savings accounts, which basically put more of the control of healthcare expenditures and healthcare responsibility into the hands of consumers.

I am very hopeful that we can make the necessary changes. If you look at where natural medicine was 35 years ago compared to now, it is a remarkably different world.

I'm proud to say that Bastyr University, under my direction, through our graduates and our faculty, has played a big role in that change. I see healthcare change as having happened already. More will happen and needs to happen. We need to remain engaged and supportive of the change.

Dr Bastyr taught his students to always keep studying. He told us never to go to bed without learning something new. Another critical teaching of this wonderful man was that healthcare providers should always touch their patients—let them know you care. That is why he was such a good physician and healer. He was technically proficient, but he was also very good at inspiring the belief in each patient that he or she had the ability to be healthy. It all comes down to truly caring for people and then being as good a clinician as one can be.