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Stephen Barrett, MD on Medical Quackery

By Norman M. Goldfarb

Stephen Barrett, MD operates Quackwatch (http://www.quackwatch.org), a leading source of information on quackery and health fraud. Dr. Barrett, a retired psychiatrist, is a prolific author and editor (50 books and thousands of articles) and relentless consumer advocate. He is vice president of the Institute for Science in Medicine and a Fellow of the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). In 1984, he received an FDA Commissioner's Special Citation Award for Public Service in fighting nutrition quackery. In 1986, he was awarded honorary membership in the American Dietetic Association. From 1987 through 1989, he taught health education at The Pennsylvania State University. In 2001, he received the Distinguished Service to Health Education Award from the American Association for Health Education.

Do you distinguish between quackery, fraud and malpractice?

Yes. Malpractice is the failure to meet mainstream standards of care. Fraud is deliberate misrepresentation. Quackery, as we define it, involves the promotion of unsubstantiated methods that lack a scientifically plausible rationale. Although some overlap exists, most cases of malpractice involve negligence rather than fraud or the promotion of bogus methods. Many quackery promoters hold sincere beliefs in what they offer.

How did you get started on quackery?

In the late 1960s, I read two books that changed the course of my life. One was about the struggle to protect the American public from dangerous and quack remedies. The other was about the problems posed by chiropractic. After several discussions with friends, we started a local luncheon group that soon became a nonprofit corporation called the Lehigh Valley Committee Against Health Fraud. For several years, we issued news releases about our meetings and the publicity attracted more members. We also sent letters to national publications and got responses from all over the United States. This eventually led to the formation of a national organization called the National Council Against Health Fraud.

What issues did you initially work on?

Fluoridation and chiropractic. Fluoridation is a valuable public health measure. Its growth was slowed by antifluoridation scare tactics that we considered to be a form of quackery. Our committee had members from Easton, Bethlehem and Allentown in Pennsylvania. Easton was fluoridated before our group formed. Bethlehem got fluoridated as an unexpected offshoot of our antichiropractic activity. After we helped defeat a bill that would have required Pennsylvania Blue Shield to cover chiropractic services, a union lobbyist who had worked against the bill learned about fluoridation from one of our board members. Having excellent connections with Bethlehem's elected officials, he advised them appropriately and legislation to fluoridate zipped right through. Fluoridating Allentown, however, required a 30-year struggle.

What has the American Medical Association done about quackery?

For many years, the AMA had a potent department of investigation and committee on quackery. Unfortunately, they closed them in 1975 and no longer have an organized antiquackery program. The American Cancer Society issues reports on questionable cancer methods, but no other major professional or voluntary organization has taken more than an occasional action during the past 35 years.

How did you evolve into a journalist?

In the early 1970s, few reporters were interested in writing about our concerns, so I decided to write a book. At the time, I wasn't much of a writer, so I organized a team of 30 people and solicited chapters from the American Cancer Society, the Arthritis Foundation, and other prominent sources. The book, published in 1976, was called "The Health Robbers: How to Protect Your Money and Your Life." The first edition sold over 18,000 copies and attracted considerable attention. I became friends with the publisher, edited some books for him, wrote some more books, and then started a nutrition newsletter. Over the years, I gradually spent more time investigating and writing and less time practicing psychiatry. I finally closed my office in 1993.

When the Internet began to bloom, I started a website called Quackwatch and began networking with others by email. Today, I operate 24 websites, host a 550-member email newsgroup, and issue a free weekly electronic newsletter that goes to nearly 12,000 people.

What other projects have you worked on?

In the late 1970s, I evaluated the ads for health-related mail-order products. Our findings set off a chain of events that got Congress to pass the Mail Order Consumer Protection Amendments of 1983, which gave the Postal Service much greater power to attack frauds. The 1983 law enabled the agency to shut down many companies and deter many others. This worked well until 1991 when, with no public explanation, the agency simply stopped working against mail-order health scams. The law that I stimulated probably saved hundreds of millions of dollars of public money. Now, the FTC, the FDA, and a number of State Attorney Generals do enforcement actions, but the number of scammers vastly exceeds what the agencies can do and the vast majority gets away with what they are doing.

My favorite project of all time was an undercover study of hair analysis laboratories. During the early 1980s, many commercial laboratories claimed that hair analysis was useful in determining the body's nutritional status and could indicate which dietary supplements were beneficial. In 1983 and 1984, I sent hair samples from two healthy teenagers to 13 of these laboratories. The reported results differed widely from lab to lab and between identical samples sent to the same laboratory. I concluded that commercial use of hair analysis in this manner is unscientific, economically wasteful, and probably illegal, and that even if hair analysis were a valuable diagnostic tool, it is doubtful whether the laboratory reports themselves were reliable. After JAMA published my findings, thousands of media outlets issued reports and I spent an entire month doing almost nothing but answering media inquiries.

What is your perspective on the National Center for Complementary and Alternative Medicine (NCCAM)?

NCCAM is the only NIH institute that promotes treatments that don't work. It has funded more than a thousand studies, many of which have been poorly designed or failed to

address a meaningful question. There is no good reason for NCCAM's existence. It's done nothing that couldn't have been done as well or better by one of the other Institutes.

Because research dollars are limited, funding agencies usually give priority to studying methods that show the most promise. NCCAM was created to assign funding based on political considerations, rather than promise or plausibility. Despite spending close to a billion dollars on studies, NCCAM has yet to add anything to science-based care or to conclude that any method should be abandoned because it is senseless. Moreover, as a matter of policy, it has never classified any treatment as quackery.

In 1998, I served on an ad hoc NIH committee that reviewed grant applications to the NIH Office of Alternative Medicine (NCCAM's former name). The group included people with expert knowledge of research design, as well as of the modalities in the grant applications we considered. The ultimate decision-makers ignored our recommendations and funded several of the projects we considered useless. That money could have been used for something important but was wasted on junk.

Even worse, NCCAM is now funding medical school programs to "integrate" complementary and alternative medicine into the medical curriculum. In other words, our government is paying medical schools to train doctors in treatments that don't work. It's terrible what they are doing to medical education.

What is chelation therapy?

Chelation therapy involves administering substances that can attach to various minerals and speed their elimination from the body. It is occasionally useful in the treatment of lead poisoning, but the number of cases that require it is tiny. Doctors who offer chelation therapy as part of their everyday practice typically claim that it is effective against autism, heart disease, and many other conditions for which it has no proven effectiveness or plausible rationale. A recent survey concluded that 180,000 Americans underwent chelation therapy in 2007. A $30-million NIH-sponsored trial to test chelation therapy for coronary artery disease began in 2003 and is still ongoing. Knowledgeable observers have concluded that many of the researchers are untrustworthy and that the study subjects have not given proper informed consent. The Office of Human Research Protections agreed that there were serious improprieties but has permitted the study to continue.

Many people are persuaded to undergo chelation therapy through use of a "urine toxic metals test" that is a scam. The practitioners typically give a chelating agent before the urine is collected. This artificially raises the amount excreted, which is then falsely reported as "elevated."

What about devices?

The most serious and widespread form of device quackery is called "electrodermal screening" or "acupuncture according to Voll (EAV)." The devices are fancy galvanometers that measure skin resistance and use software to make diagnoses and prescribe products. In its basic form, the patient holds a handle connected to a computer by a wire. The practitioner takes another probe attached to the computer and touches the patient's fingers or toes to complete the circuit. The computer makes noises and shows numbers that supposedly represent the flow of "electromagnetic energy" through "acupuncture meridians." Some of the devices are alleged to provide treatment by "balancing" the patient's electromagnetic energy or destroying germs or tumors with "vibrations." It's all a total fake, but probably 10,000 of the devices are being used in the United States today. The FDA knows about the problem, but as shown no interest in ridding the marketplace of

these devices. The only hope for stopping these devices is to complain to your Congressional representatives.

What are some other examples of quackery?

The notion of megavitamins to treat mental illness has been around a long time. I've seen a number of patients who were doing fine on their psychiatric drugs. Quacks told them, "Oh, we can fix you. Stop your drugs and take these vitamins." The patients broke down mentally and several had to be hospitalized.

The Feingold Diet is based on the notion that children's hyperactivity is caused by food additives. I can't say that it never happens, but it almost never happens. Nevertheless, many parents have brought up their kids to believe that diet is what makes them behave one way or another. Fortunately, the Feingold Diet is not too popular any more.

A number of parents have contacted me where one parent wants to take the child to an incompetent practitioner and the other parent doesn't. In most cases, the mother is the culprit.

In one case, as part of a child-custody evaluation, I examined records from nine naturopaths who had treated a child whose mother was antagonistic to medical care. The child was not properly immunized and did not see a medical doctor until she developed insulin-dependent diabetes mellitus (IDDM) shortly before her eighth birthday. Although episodes of "chest congestion," "chronic cough," "vaginitis," "urinary burning," and "asthma" were noted in the records, there were no indications that these problems had been adequately diagnosed or appropriately treated. (One episode of "chest congestion" that could have been pneumonia was treated with homeopathic remedies.) The only medical referral took place after the child developed severe signs of diabetes. I wrote a report that helped the father work out an agreement with the mother that a pediatrician would have the final say over the child's treatment. Once the father gained control, she got proper care.

In another case, a father discovered that his son had been chelated without his knowledge. My review of the medical records validated the father's concerns. He told the doctors to stop and they did. The child appears to be out of danger now, but the wife has initiated a legal battle to take control of their child's medical care. I hope the father will prevail.

In another case, a gentleman contacted me about his wife and daughter. They had come under the influence of someone who was treating them for "multiple chemical sensitivity." They'd spent $50,000 on the treatments, with no end in sight. He said, "My wife says that if I interfere, she's going to divorce me. But if I don't interfere, I'll go bankrupt. What should I do?" He was in a no-win situation. I asked him if going bankrupt would save his marriage. He cut off the money and she divorced him.

How can people tell if something should be considered quackery?

Rather than analyzing individual claims, we recommend learning how to avoid untrustworthy information sources. Quackwatch has several articles on how to do this. One is "Twenty-five Ways to Spot Quacks and Vitamin Pushers." (http://www.quackwatch.org/01QuackeryRelatedTopics/spotquack.html) Another is "Signs of a Quacky Web Site." (http://www.quackwatch.org/01QuackeryRelatedTopics/quackweb.html) The simplest rules of thumb are to avoid or dismiss anyone who says that everyone needs to take supplements and to shun medical advice from any person or website involved in the sale of dietary supplements, herbs or homeopathic products.

Many people believe that the best way to make decisions about health products is to read everything they can find and decide who is telling the truth. That rarely works, because sorting fact from fiction can be extremely difficult without medical training. A lot of information is designed to look objective and balanced, when it's really just trying to sell you something. For example, if one out of 100 studies supports some wacky idea, which study do you think will be quoted? Rather than trying to sort things out, it is better to develop good "information anchors" that filter the information and provide accurate and practical advice. The best print health newsletter, for example, is "Consumer Reports on Health."

Most people think they are too smart to be fooled. Many media leaders underestimate how easily their audiences can be misled. In the early 1970s, I asked Consumer Reports to investigate chiropractic. An editor replied, "I don't think our readers go to chiropractors." I said, "Poll your staff." It may have been a coincidence, but shortly after this conversation, the magazine assigned a reporter to investigate and eventually produced the most comprehensive and well-reasoned report on chiropractic that has ever appeared in a magazine.

What's your take on chiropractors?

Although chiropractors sometimes help people with back pain, the vast majority are engaged in unscientific practices. For example, about 40% of them use "applied kinesiology," in which muscle strength is used to determine the health status of organs throughout the body. To conduct the tests, some practitioners place various substances under the patient's tongue and pulls down on the patient's outstretched arm. Other practitioners conduct the tests while the patient holds a bottle containing an extract in their hand. Some even purport to test a child while the parent holds the bottle in one hand and touches the child with the other hand.

Many chiropractors advise patients to come frequently over long periods of time, even if they have no symptoms. These chiropractors claim to detect "subluxations" that they claim will cause disease of not treated. Several times a month I hear from people who were lured into year-long contracts under which they paid in advance for 50 to 100 spinal "adjustments."

Chiropractors are also heavily involved in fighting immunization. Surveys have found that about a third of them advise patients to avoid vaccinations.

Have you ever been sued for libel?

I've been threatened many times but sued only once. The case was dismissed on a preliminary motion because — as the judge ruled — my article contained no language capable of a defamatory meaning. Although many of the people I criticize would like to muzzle me, I am not an attractive legal target because I write very carefully and do not step on people's egos by insulting them.

Who else is fighting quackery?

The number of people who make fighting quackery a priority is fairly small. At the front lines now, I'd say there are probably about 20, which is more than there have been in the last 30 years. A new organization, the Institute for Science in Medicine, was formed a few weeks ago. It will probably take over where the National Council Against Health Fraud left off. It's going to have a broader mission and deal also with poor science, not just quackery.

What can the clinical research community do to fight quackery?

Do good clinical research. Be alert to sellers misinterpreting your research. For example, I came across a "Coral Calcium" infomercial in which the marketer claimed that a research paper in the Journal of the American Medical Association said that calcium supplements can prevent and reverse cancer. The infomercial didn't identify the paper, but I was able to figure out which one it was. In 1998, researchers reported that increasing the daily intake of calcium by up to 1,200 milligrams using low-fat dairy food in subjects at risk for colonic cancer reduced growth characteristics thought to be associated with the development of cancer. The study indicated that increased attention to calcium may find a role in cancer prevention, but the study said nothing to about either calcium supplements or the "reversal" of an established cancer. I called the author and asked, "Do you know your paper is being misrepresented?" He didn't, so I sent him a transcript of the infomercial. I don't know if he did anything, but the FTC stopped the scam.

What can the average person do to fight quackery?

The first thing, of course, is to avoid being a victim. The second thing is to caution others who are in the process of being victimized. Speak out when you can. Ask for refunds. Complain to licensing boards. Join the newly formed Institute for Science in Medicine. Become better informed — subscribe to our free newsletter. Donate money to the individuals and organizations at the front lines.

Do you see hope for the future?

With the advent of the Internet, we see more variety in quackery. It enables bad information to be disseminated at much less cost than other media. On the other hand, it enables people like me to reach people with information that the print and broadcast media are unwilling to convey.

Dr. William Jarvis, former President of the National Council on Health Fraud, provides a useful analogy for people who get discouraged. Think about garbage trucks. No matter how much they haul away, there's always more. But imagine what would happen if they stopped coming. We'd all be buried in it. The same is true of quackery. If nobody did anything to oppose it, it would be even more prevalent than it is today.

People who use my websites probably save hundreds of millions of dollars each year, but that's only a small fraction of all the money wasted, to say nothing of health. We can reach people who want to be educated, but it's a never-ending battle. It would be nice to get more help from the government, but achieving that will be a great struggle.

Interviewer

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