

The Researcher's Riddle: Why Did the Chicken Cross the Road?

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My title is a simple, age-old riddle designed to generate a variety of straightforward answers - right? No way! Many times we have encountered this problem in research. Sometimes the provision of documented information that is perceived as threatening generates a response that is totally without justification. From the times of Socrates and Galileo to the present, embarking upon the learning curve for new ways of thinking is for some individuals more like slamming into the walls of the Grand Canyon. How people react to novelty may vary from outright intimidation and stonewalling to transforming (anything from massaging to distorting) the information involved. It was Albert Einstein who once pointed out, "Great spirits have always encountered violent opposition from mediocre minds."

In an illuminating article just published in the *American Journal of Public Health*, Linda Rosenstock offers an extensive catalogue of tactics used to undermine sound science, falling into four major groupings:¹

1. Economic manipulation: This would include (a) delaying the publication of research results pending an application for a patent; (b) delaying the dissemination of negative results; (c) altering the hazardous classification of chemicals, depending upon whether or not the studies or their authors had financial ties to industry. Well-known examples of this tactic included (a) the lobbying by orthopedic surgeons for zero funding of the AHCPR (AHRQ) after their back pain guidelines favored nonsurgical over surgical approaches; (b) the hiring of scientists by tobacco and pharmaceutical industries to write letters for publication in scientific journals favoring their products and/or discrediting problems of secondhand smoke.
2. Delay: Here we find (a) initiating litigation; (b) fighting for access to raw data; (c) inundating researchers with administrative details; (d) catalyzing congressional reports or inquiries, and retarding work on such issues as ergonomic standards.
3. Hidden identities: A number of vested interests have hidden their identities by masquerading as grassroots organizations. These would include; (a) the National Coalition on Ergonomics opposing ergonomics standards; (b) the Food Chain Coalition representing the pesticide industry; (c) the Doctors on Integrity in Research and Public Policy opposing gun control and handgun research; (d) the Center for Patient Advocacy - the orthopedic group that lobbied against the AHCPR.
4. Harrassment: This is self-explanatory.

"Spin control" of course is an option familiar to everyone, regardless of professional or religious affiliation. One of its more sinister examples was just brought to my attention by Vic Weatherall, DC, who pointed out how Phil Greenman, the dean of osteopathy at Michigan State University, was paraphrased by one Greg Blaney in an article in the Canadian Medical Post Online. As a student in

MSU's CME program in biomechanics and osteopathic manual therapy, Blaney heard Greenman explain what was presumed to be "differences between the improper high-velocity, large-amplitude manipulation (chiropractic technique), and the correct (emphasis mine) high-acceleration, low-amplitude manipulation (osteopathic)."² With this deliberate inversion of the terms "large" and "low," one can easily appreciate how this poorly disguised sleight-of-hand profoundly degrades both our understandings and the historical derivations of chiropractic and osteopathic manipulation. As Dr. Weatherall so ably suggested in his email letter to me: "Large-amplitude manipulation is what Steven Segal and 'Arnie' do in their movies."³

"Living large" may be appealing to a lottery winner, but it is not something that a chiropractor does to his or her patients.

From the point of view of a Vancouver-based MD, Blaney continues on his discrediting of chiropractic manipulations by first suggesting that a "high level of skill" is required to avoid injury to the vertebral basilar artery, which "occurs when the artery is kinked backward by hyperextending the neck and rotating it forcefully to its anatomical limits." He indicates that he would never use these techniques, but would instead opt for "better, safer and easier techniques, such as muscle energy, myofascial release and functional osteopathy" to achieve the desired results. His concluding remarks are that his mentor, Phil Greenman, has recommended in his text on osteopathic manual therapy, *The Principles of Manual Medicine*, that the thrust technique is to be avoided - particularly in the neck - as "inappropriate use yields poor or no therapeutic results, and risks complications."²

Much of this discourse stems from the onslaught regarding cervical manipulations brought on by a group of Canadian neurologists a few months ago, which I discussed at length in this column previously.⁴ What grew out of all this was the most surreal and outrageous (but not really surprising) response from the TIME.com columnist Leon Jaroff, whose comments I had refuted in this space in April. From reading this excerpt from Jaroff's letter, you will immediately find that the Albert Einstein quote that I cited above has been totally vindicated:

"You will note, I'm sure, that my little commentary in Time.com readily acknowledged that chiropractors provide effective treatment for lower back pain and stiffness. It's the other practices and claims of chiropractors with which the column took issue, subjects that we ought to address and not ignore.

"You seem to agree that chiropractic manipulation can be effective in treating such disorders as migraines, premenstrual syndrome, infantile colic and ear infections. What total nonsense! Perhaps among other things, you need a refresher course in immunology. And your letter wisely chooses to ignore that many, and perhaps a majority of chiropractors endorse and prescribe such treatments as homeopathic potions, colon irrigation, colored light therapy, hair and iris readings and applied kinesiography, all of which are nothing but ignorant quackery. And how about the widespread opposition among chiropractors to vaccinations and fluoridation?

"My column, unlike many chiropractors' claims and theories, did not materialize out of thin air. It was the result of consultations with many of the medical experts that I have dealt with over the years and learned to trust. These are people with proven accomplishments and even triumphs in medicine; accomplishments that have bettered and saved countless lives. Their tutelage of me, in the course of many interviews, has contributed largely to my journalism awards in the fields of science and medicine.

"Again, many people, including some of my friends, have benefited from chiropractic management

of lower back pain and stiffness. Let's leave it at that and otherwise agree to disagree."⁵

This from a person who has won a boatload of awards in scientific journalism! Twenty years ago I could conceive of having been intimidated by these sorts of comments - but no longer, because of our highly productive research that has been conducted with a minimum of resources. It simply tells you how far we have to go both in delivering the data that already exists and in continuing our research efforts, including supporting FCER.

Why does this bogus information continue to proliferate? Rampant paranoia, internecine rivalry, and failure of the media to verify its information are but a few of the answers. Certainly one can appreciate all the more an ingenious answer to the riddle posed above as the title of this column, so eloquently expressed by the actor Delroy Lindo, playing the role of Bobby Blane in the movie "Heist":

"Why did the chicken cross the road?"

"Because the road crossed the chicken."

References

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