Written by Harriet Hall
Wednesday, 31 December 2008 00:00

We frequently criticize the media for gullible reporting of pseudoscience and inaccurate reporting of real science. But sometimes they exceed our fondest hopes and get it spectacularly right. On December 25, 2008, the Wall Street Journal gave us all a Christmas present: they printed an article by Steve Salerno that was a refreshing blast of skepticism and critical thinking about alternative medicine.

Salerno points out that 38% of Americans use "complementary and alternative medicine" (CAM) and it is being increasingly accepted in hospitals and medical schools. He says this should be a laughing matter but isn't because of the huge amounts of money being spent on ineffective treatments. Not to speak of the huge amounts of money being wasted on implausible research at the NCCAM.
He highlights a painful irony: the same medical centers that once fought quackery are now embracing it, not because they think it will improve patient care, but because it will increase their revenue.

Salerno quotes Dr. George Lundberg, one of the many who have said there is no such thing as CAM. There can be alternatives within medicine (like which antibiotic to choose) but there can be no "alternative medicine." There is only medicine that has been proven to work and medicine that hasn't. If science showed that an "alternative" treatment really worked, it would be promptly and enthusiastically incorporated into standard medical practice and would no longer be considered "alternative." So the very term is misleading.

"Alternative medicine" is not a scientific concept. It is a political, ideological ploy intended to raise public respect for a mishmash of untested, unproven, and even disproven treatments that are rejected by the scientific community. We used to call those treatments quackery, folk remedies, untested, belief-based. A rose by any other name...

Why should we have "alternative" medicine if we don't have "alternative" engineering? Dr. Mark Crislip wrote a brilliant satire
entitled "Alternative Flight."

He says, "Americans want choice....People need to be free to choose their mode of flight based on alternative concepts of gravity and alternative airplane design....you can focus your Qi dong to harmonize with the airplane to decrease the mass of the airplane and provide a more efficient

forward motion. Or collapse your personal wave function to arrive at your destination early."

It's easy to see why alternative flight is nonsense. Why is it so hard for most people to see that most of "alternative" medicine is equally nonsensical? Most people are smart enough not to fly on an "alternative" airplane, but they're eager to fork out $125 for an hour-long session of DNA Activation Healing, they buy water disguised as homeopathic remedies, and they let reflexologists treat their gallbladder by pressing on their feet.

For most of human history, people used medicines recommended by friends or tradition. Sometimes they worked; sometimes they didn't. Then humanity discovered a wonderful thing: the scientific method. Medicines could be tested to find out the truth about what really worked. Alternative medicine is a step backwards: it asks us to forget about good science and believe in testimonials, untested treatments, irrational, and even disproven treatments.

I can hear readers now, saying "But some of those treatments might really work." Maybe, but only science can tell us which ones. Science doesn't waste time testing every crackpot idea; it has to choose promising avenues of research. Would you want to divert funds from cancer research to re-evaluate the efficacy of bloodletting for balancing the humours? Or to re-examine all those alleged perpetual motion machines? It may have been reasonable to test St. John's wort; but it is not reasonable to keep testing ultra-dilute homeopathic remedies. It is not reasonable to keep looking for a mythical chiropractic "subluxation" after a century of failure to find it. It is not reasonable to fund studies on "therapeutic touch" unless someone can demonstrate that "human energy fields" exist and can be detected by nurses' hands.

Is there any "alternative" treatment that was ever tested, found to be effective, and subsequently incorporated into standard medical practice? I don't think that has ever happened except for herbal remedies. Herbal remedies are a special, plausible subset of "alternative" treatments in that they contain active ingredients with physiologic effects. They are drugs. Plants are regularly evaluated by scientific pharmacology. Many of the remedies touted by "alternative" advocates have not been properly tested by pharmacology, usually because they don't offer enough promise to warrant further testing.

Foxglove was a folk remedy for heart disease. It clearly worked. The effects were robust and consistent, not marginal and erratic like so many alternative remedies today. It was promising enough to warrant proper scientific testing. It was analyzed, purified, and a standardized product was developed. It had side effects and the therapeutic dose was dangerously close to

the lethal dose, so scientists developed a synthetic variant that was safer. Today we can buy a Digoxin pill with a precise dose instead of crushing a foxglove leaf and taking potluck.

Is foxglove an example of an alternative medicine that was adopted by scientific medicine? Not really. It's simply a good example of science in action.

As Bob Park says in his book Superstition, if it's not science, it's superstition. There is only one kind of medicine we can trust: science-based medicine. We should be trying to weed out every vestige of superstition in scientific medical practice, not embracing new superstitions from alternative medicine. Thank you, Wall Street Journal, for the injection of sanity!