

Skepticism or Cynicism?

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Barry Goldwater said that "extremism in defense of liberty is no vice." To some in the skeptic movement regarding complementary and alternative medicine, this might be rewritten that extremism in defense of medicine is no vice. I recently watched a video of a panel discussion from the James Randi Educational Foundation's [The Amazing Meeting](#). (I think their hope with the meeting name is to get TAM known the way TED talks are, but given this was TAM 10 and I've not heard of it before, I think their marketing plan still needs work.) The title of the panel was "The Truth About Alternative Medicine."¹ The word *truth* ought to have been in quotation marks, as these skeptics could be better described as cynics.

The members of panel were the "usual suspects" of anti-CAM crusaders. I am sure they would take umbrage at that description, as they view themselves as just proponents of science-based medicine. They all agreed on a definition of CAM, which was that there is either medicine, which has been proven to work, or CAM, which are all those treatments that have been proven to not work or have no evidence. The panel made it seem as if all conventional medical interventions have been subjected to Phase III or V trials.

On its face, this definition is beyond ridiculous for many reasons. First, as I've taught my students for years, when it comes to clinical research one can never use the word *proof*. Given that a clinical study that finds a statistically significant outcome only provides for a very low probability that the researchers are wrong in their conclusion (typically less than 5 percent chance they are wrong); one doesn't have definitive proof. In the end there is just evidence that supports or does not support ones hypothesis.

Conventionally, when the body of such evidence is universally supportive of the hypothesis, one might say that there is compelling evidence and typically it is accepted as fact. Sometimes these "facts" are found to be invalid.² Despite the desire to have "proof" for all things CAM, one member of the panel noted that medical research is often refuted by newer studies.

While it is not uncommon to hear CAM practitioners say that most of conventional medicine isn't evidence based, this is not universally true. The percentage of conventional medicine that is evidence based depends upon which specialty one is speaking of, but most have a large body of evidence.³ However, the only placebo-controlled surgical studies I know have found that the surgery is no better than placebo.^{4,6}

By using the panel members' logic, those treatments that have not been subjected to rigorous scientific testing or have been found to be ineffective must be CAM. So, that means [vertebroplasty](#), as an example, is now CAM and any surgeon who uses it is a CAM practitioner.⁷ I guess every MD in the world who tells a patient with acute LBP to just rest in bed is a quack practicing CAM. And as we know, MDs who have a special interest in back pain⁸ are more likely to be quacks, meaning they recommend a clearly ineffective treatment.⁹

This is sarcasm, to be sure, but really, defining all CAM as without evidence just isn't valid. Maybe 20-30 years ago there was no evidence regarding most CAM procedures, but then again, there was little evidence about the clinical effectiveness or the comparative clinical effectiveness of conventional medical procedures, either. And to give the panelists credit, they do note that some CAM treatments have been found to be effective - but of course, now they consider them medicine.

The panelists complained that CAM practitioners apply a double standard to the science; CAM practitioners want their treatments to be regarded the same as other treatments, but don't want to "follow the rules." In other words, CAM practitioners don't want to use scientific evidence.

The problem is the lack of intellectual honesty about the state of health care and in fact applying a double standard whereby they assume that all medicine is based upon good scientific medicine and all CAM is bereft of evidence. Let's all play by the same rules and not place a higher burden of evidence on CAM than on medicine.

There may be some in the CAM community who do not want to "play by the rules," but generalizations are not the best method of critique. It diminishes the strength of the critique when one generalizes and speaks in definitive, absolutist terms. An honest approach would be to note specifically which CAM practices are lacking evidence, which ones have evidence of lack of effect and which ones have evidence of effectiveness.

When it comes to chiropractic specifically, the panelists implied that there is nothing good about it. Yet we know there is a growing body of evidence regarding the treatments we use regularly.¹⁰ The panelists also continued a common mistake by conflating chiropractic and spinal manipulation.

While we do perform the majority of [joint manipulations](#),¹¹⁻¹² it is not the totality of the interventions we use. Chiropractic is a profession, not a treatment, even if that mistake is made in the literature often.¹³

I am not opposed to criticism of our profession and have written before that a critic can be our friend.¹⁴ But the criticism must be honest, not just cynical.

References

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