## Debating a skeptic



Why is it that so many patients are looking for alternative and complementary medicines and treatments?

Should more studies be conducted on alternative or complementary treatments, or is it a waste of money and time?

Does integrative medicine belong in academic medical centers—should it be taught at all?

These are among the questions that I discussed last month as a panelist on a Medscape Facebook Live event—Both Sides Now with medical ethicist Dr. Art Caplan. The theme: "Alternative Medicine: Should Physicians Embrace or Reject It?" You can watch the roundtable here.

I arrived at Medscape's midtown Manhattan studio expecting a softball interview, only to find that my sparring partner was none other than renowned skeptic and vociferous opponent of all things "alternative" Dr. Steven Novella.

Dr. Novella is a neurologist and an assistant professor at Yale. In some ways he's my alter ego, a media-savvy practicing physician. But in contrast to me, he has a deep mistrust for the type of medicine I embrace.

He certainly has done his homework. He's highly intelligent and a skilled debater. In fact, he hosts his own podcast series, *The Skeptics' Guide to the Universe* wherein he debunks pseudoscience. He particularly has it in for homeopathy ("does not work for anything"), acupuncture ("based on magic, and it doesn't work"), naturopaths ("they are not based in science or reality"), and anti-vaccine activists ("a deliberate deception"). During our Facebook live session, Novella hammered away at the "unscientific" nature of what I prefer to call integrative or complementary medicine, in lieu of the term "alternative," which implies a dichotomy between orthodox medicine and innovative natural approaches.

When I brought up the TACT study (Trial to Assess Chelation Therapy) as an example of how an alternative modality once considered quackery could vault into the mainstream by virtue of a well-conducted study that demonstrated its efficacy, he was ready with a response: The TACT study, he asserted, was methodologically flawed—"junk science."

When I moved on to curcumin as a model of how scientific research could validate a natural herbal treatment, he used a similar tactic: By citing a contrarian study, he asserted there was no evidence that curcumin was bio-available in humans.

As the debate progressed, I realized that Novella consistently fell back on two rhetorical devices to negate the benefits of integrative therapies: Either the studies were said to be invalid, not meeting his exacting standards; or else, if the studies were indeed valid, the therapy in question, be it diet, exercise, or

whatever, belonged in the realm of mainstream medicine—hence the alternativists could no longer lay claim to it.

This is a no-win proposition for integrative therapies, because either they're unproven (false) or, like vitamin E for treatment of fatty liver disease, they leave the realm of "alternative" and become mainstream by virtue of their validation by scientific studies.

I was struck by the tenacity with which Novella held to his skeptical views. That's not science, it's ideology. Admittedly, my bias is toward natural therapies, but when surgery or medicine work better, I'm the first one to acknowledge it. In fact, I coined the term "Intelligent Medicine," which means the best of both worlds in a quest for practical solutions to patients' problems. Novella has has embraced "skepticism" with a zeal akin to religious orthodoxy.

Chief among Novella's contentions was that alternative medicine endangers patients by leading them to eschew conventional therapy, delaying or foregoing potentially curative conventional treatment. Art Caplan, the moderator, amplified that theme by bringing up the example of Apple founder Steve Jobs who utilized dubious natural strategies to cure his pancreatic cancer. Novella then cited a study that indicated that cancer patients who choose natural options do worse than those who comply with standard treatment recommendations. But this study looked at treatable cancers where patients irrationally undertook alternative therapies to the total exclusion of conventional surgery, radiation, chemo, hormonal treatment or immunotherapy.

When I treat patients with cancer, I prefer to use natural and innovative therapies as an adjunct to standard care. This is complementary medicine, not either/or medicine.

Most studies of patients utilizing integrative medicine show that they are intelligent, well-educated, affluent and remain under standard care while exploring alternatives. One problem is that they profess difficulty talking to their doctors about complementary modalities, for fear of being disparaged, or because their doctors wouldn't know what they're talking about. Indeed, that's why I wrote *How to Talk to Your Doctor (About Complementary and Alternative Medicine)*.

Most surprising was Dr. Novella's violent opposition to teaching medical students and doctors-in-training about integrative practices. He is afraid that doing so would legitimize them. I argued that, whether or not you agreed with them, medical alternatives have been embraced by a high percentage of patients, and it behooves doctors to learn about them.

Novella has been a vocal critic of the new \$200 million Samueli Institute initiative to incorporate study of complementary modalities within the Keck Medical School. He disparagingly calls it "quackademic medicine" and argues "the bottom line is that the University of California Irvine should be thoroughly ashamed of itself for compromising its own academic integrity. It is now the standard bearer for quackery in academic medicine."

But natural therapies are embraced by nearly half of Americans, so is it reasonable to ignore them? Should doctors remain uninformed about what their patients are doing? Should we stifle research and debate as to the merits and safety of something to which the public is turning in droves because they don't find mainstream medicine meets their needs? [Read John Week's pointed rebuttal to the Samueli detractors.]

Novella reserves special disparagement for the supplement industry which he claims is rife with fraud and adulteration. This illustrates the old adage "If you're not

up on it, you're down on it." Admittedly, there are bad players in the health product industry and we need to clean up our act, but Novella has little familiarity with the ethical and high-quality manufacturers from whom I carefully curate products suitable for my patients.

Ultimately, I'll leave it to you to judge who prevailed in the Facebook live debate—I encourage you to view it. Meanwhile, I'll leave you with this 2005 quote from Dr. John Yu, a pediatrician at Alberta Children's Hospital in Calgary, Canada, entitled: "Could evidence-based medicine be a danger to progress?"

"In this 100th year of celebration of Albert Einstein, I have been thinking about his papers on theoretical physics, done purely by deduction, and how they changed our view of the world. His way of thinking is in sharp contrast to that of evidence-based medicine, which has become almost a dogma in some medical circles. Yet if everything has to be double-blinded, randomized, and evidence-based, where does that leave new ideas? I do worry that if evidence-based medicine becomes the dominant thinking, it could impede advances in medicine."

Learn more about trends in the use of complementary medicine in the U.S. by clicking here.