

## The unwellness industry: Part three

By Bill Kilpatrick

In an age of mis and disinformation it's more important than ever that have tools that can help distinguish between what is real, what might be real, and what is BS. Don't get me wrong, I'm not saying that pseudoscience practices like Reiki, homeopathy, or ozone therapy should be banned outright, but what I am saying that we should tolerate them as long as they stay in their lane and are honest about the efficacy of their practices, but I question whether this is even possible. What is their lane you ask? A story about a doctor named Albert Schweitzer will better explain what I mean.

In his 2013 book, *Do you believe in magic? Vitamins, supplements, and all things natural: a look behind the curtain*, Dr. Paul Offit, tells us about the medical clinic that Dr. Schweitzer set up in Lambaréné, Gambon, Africa in 1912. Around that time, an author, Norman Cousins, met him in Africa and praised the great medical work Schweitzer was doing. Cousins told him that it was great that the locals no longer had to depend on witch doctors who often gave unsafe treatments. When asked about what he knew about witch doctors Cousins was stopped in his tracks because he actually knew nothing, so Schweitzer had him observe how his clinic worked in conjunction with the witch doctor and not in opposition to him. What Cousins found was that there were three types of patients, those who had minor illnesses that were treated with herbs by the witch doctor, those who had psychological problems, that were also treated by the witch doctor using incantations, and the third group, that often had serious medical problems that only Schweitzer could treat, were sent over to Schweitzer accordingly.

Offit outlines Dr. Schweitzer reasoning:

?In Gambon, both Albert Schweitzer's modern medicine and the witch doctor's ancient medicine had their place. Schweitzer offered specific treatments for treatable diseases, and the witch doctor offered placebo medicine when nothing more was necessary or available. Both recognized the value of the other. Such is the case with today's mainstream and alternative healers; both have their place. The problem comes when mainstream healers dismiss the placebo response as trivial or when alternative healers offer placebos instead of lifesaving medicine or charge an exorbitant price for their remedies or promote therapies as harmless when they're not or encourage magical thinking and scientific denialism at a time when we can least afford it.?

Staying in your lane means knowing and admitting to patients that the treatment they are about to receive are not proven to work beyond placebo or has not been proven to work at all and that no credible scientific evidence exists to say that it works. For example, on the Ontario College of Homeopathic Medicines page is says that homeopathy ?It is used to treat individuals with both chronic as well as acute health concerns,? then it lists definitions of chronic and acute and it gives examples. The website claims, ?Acute conditions generally have a rapid onset with severe symptoms that last for a short duration (e.g. flu, malaria, acute renal infection) whereas chronic conditions exhibit symptoms that have a slow onset and long duration (e.g. diabetes, hypertension, rheumatoid arthritis, asthma). By healing holistically, one will ensure cure on a mental, emotional and physical plane that is non-invasive, gentle, quick, safe and permanent.?

The implications here are that homeopathy can cure asthma, diabetes, flu, malaria, and acute renal infection, which is a bacterial infection that causes inflammation of the kidneys. Homeopathy cannot cure any of these, despite the the college's webpage implying otherwise, and if you suspect that you have acute renal infection go to the doctor and get antibiotics as it can be fatal. If you are having an asthma attack do not use the homeopathic inhaler as an article in *Medical News Today* points out, ?People should not use homeopathic remedies to treat asthma attacks. There is no evidence that they will work, and this could lead to a life-threatening situation.?

This is a case of not staying in your lane, magical thinking, and not knowing your limitations, and it could result in someone dying, but nonetheless the College proudly proclaims that, ?The Transitional Council of the College of Homeopaths of Ontario established and implemented standards of education and practice to protect the welfare of the public and to make sure that Health Care Professionals meet the criteria required to practice as Homeopaths in Ontario.? This scenario reminds of Lisa Simpson's comment to

Homer after he started a vigilante group where she says, 'If you're the police, then who polices the police?' and Homer replies, 'I don't know, coast guard?' To admit that homeopathy does not work beyond the placebo effect would be self-policing, to allow unproven and possible life-threatening treatments to get distributed to the public? This is nothing short of dangerous self-deception and should constitute malpractice.

I do not share Dr. Offit's optimism that witch doctors can play nice and stay in their own lane. Because there are no scientific standards to measure their treatments and we can't trust them to be honest and since they are often led by self-deception, they will always venture out of their realm and potentially cause harm in one way or another. Which is why we need to arm ourselves against pseudoscience through critical thinking and be aware of red flags that often signal that pseudoscience is lurking around the corner.

Dr. Jonathan Stea, who I've mentioned in previous editorials, has a list of nine red flags that he outlined in his 2024 book, *Mind the Science*. If you've been following my editorials you'll remember that Dr. Stea prefers to classify pseudoscience in terms of degree rather than in kind. His red flags are as follows: do they explain away negative findings? Is there an absence of self-correction? Do they evade of peer review? Do they put emphasis on confirmation rather than refutation? Do they use the reverse burden of proof? Are their claims divorced from the broader scientific literature? Do they elevate anecdotal evidence above other evidential measures? Do they use science-y sounding language? And as I noted above with homeopathy, is there an absence of boundary conditions? For example, do they claim that what they sell can 'cure' everything and anything. While this list is not exhaustive it does allow readers some protection against falling for pseudoscience. As Dr. Stea notes, the more red flags that are raised, the more likely it's pseudoscience.

However, the best way to arm yourself against pseudoscience and mis and dis information is to teach yourself how to think critically, this is a never-ending process as businesses, alternative medicine practitioners and wellness gurus are constantly changing their marketing tactics to try and get your money. It's about becoming aware of your own bias and thinking errors that often lead us to the wrong conclusions and result in us falling for their unproven claims.

There are over 100 different logical fallacies, but some, especially when dealing with wellness claims, occur more often than others. For example, the appeal to nature fallacy. This assumes that just because something is natural it is superior to something that is unnatural. The problem comes when we start defining what is natural and what it not. Another common error is the post hoc ergo propter hoc fallacy. This happens when we assume that just because A happened right before B, A must have caused B. For example, if I took a homeopathic remedy when I had a cold and I got better, I might conclude that it worked, when in fact it was my immune system all along and the remedy did nothing because I would have gotten better anyway, naturally. When it comes to pseudoscience, to be forewarned is to be forearmed, because once you catch onto their tricks, you will be amazed at the places they show up... everywhere.