I cannot say enough how important it is for physicians to have a working knowledge of junk science. While it sometimes can be difficult to not get snarky when patients claim they have nonsense diagnoses, it behooves the clinician to approach this type of situation with extreme diplomacy. We cannot do this if we are not equipped with the knowledge to combat the plague which is medical quackery.

The really sexy word around town, as I have noticed, is “wellness.” Empires are built on the notion that we are, at baseline, not well. And unless we buy what they sell, we will not attain both inner and outer beauty. What I did not know is how pervasive these wellness “clinics” are and the plethora of websites touting benefits that have no real foundation in evidence based medicine.

The ultimate success of wellness gurus depends on the ability to convince their potential victim (apologies for using such a tacky term – I meant “client”) that they suffer from an illness. These "medical spas" or "wellness centers" offer the remedy for said illness. What if the client does not have an illness – well, that’s no problem because they can just make them up.

These are but a few of the ailments one may suffer from:

- Adrenal fatigue [2]
- Leaky gut [3]
- Chronic Lyme [4]
- Systemic candida/fungal infection [5]
Hormone imbalance \[6\]

- Multiple chemical sensitivity syndrome \[7\]

The problem with these types of "diseases" is that they don't exist – at least not in the sense that's being marketed. The vagueness itself allows charlatans to manipulate medical facts to make them more malleable – to serve as an umbrella term that covers a pseudo-diagnosis. If the medical establishment then tries to fight these claims, somehow, they are pill-pushing big-pharma shills – at least this is what patients are taught to believe. Yet, these same individuals are completely okay allowing strangers with questionable credentials to stick a needle in their vein for some fad infusion – sometimes resulting in death \[8\].

The problem is the little bit of medical fact is so contorted that at the end of the day it is completely unrecognizable. For example, for individuals suffering from inflammatory bowel disease, there may be some structural and functional compromise of the intestinal lining causing displacement of gut bacteria and malabsorption. For people wondering if they have "leaky gut" and not suffering from an actual gastrointestinal disorder, chances are their guts aren't leaking. And they probably should save the $268 \[9\] that it would cost to find out.

Some folks who are convinced they have Multiple Chemical Sensitivity Syndrome will go to their doctor and demand lab tests to confirm this "diagnosis." Thanks to Press-Ganey \[10\] patient satisfaction surveys and fear-based medicine, healthcare is now in the hands of those who Yelp review - these are not people you want to antagonize. As a physician who has never heard of multiple chemical sensitivity syndrome, I could potentially waste an exorbitant amount of healthcare dollars/resources trying to work this up. These are all reasons why it is so important to provide patients with credible arguments to reject buying into this wellness scheme.

How can the scientific community perform meaningful randomized controlled trials on adrenal fatigue when it is a completely unrecognized medical diagnosis \[11\]? If you crave salt and feel tired, your brain is sending signals to your body to replete what's missing. You're probably tired for a billion other reasons that have zero to do with your adrenal glands. Perhaps you're running yourself ragged trying to survive in this crazy world.

The other problems with these elusive aforementioned diagnoses are creating undue anxiety and equally as important, we could be missing a very real underlying psychiatric component that is causing the suffering. The stigma of a mental disorder has people chasing their tails trying to find a medical explanation for what truly ails them. Creating fake medical conditions detract from having a meaningful conversation about mental health and it misdirects the physician.

Listening to patients and giving their concerns sufficient credence builds a strong alliance. Healthcare practitioners cannot effectively do this if we don't know how to combat these "wellness shills." They are making money hand over fist at the expense of vulnerable public claiming they are anti-establishment. They are putting people at risk and it's high time we sounded the alarm bells.