Written by Dr. Steve Novella Saturday, 22 December 2012 09:00

I frequently get spam e-mail of the snake-oil variety. I don't know if my online activities result in my getting more such e-mails than the average internet-goer, but I certainly get a lot. I have a special folder I reserve for such e-mail. Perhaps one day I will sort through it as a sociological study.

I do subject myself to the pain of actually reading the snake-oil spam, and there are definitely certain patterns that emerge - more than just patterns, many such e-mails seem to follow a script. Perhaps somewhere in the dark underbelly of the internets there is a place where you can download a boiler plate snake oil scam - all you have to do is fill in the blanks and you have your own scam.

Perhaps it might look something like this (cut and paste from actual spam I have received):

"My innovative patented technology, equipment and methods of elimination _____ in any environment is a revolutionary method supporting in background therapeutic treatments and independent self preservation of people with health problems listed below."

This one may be for non-native English speakers. Many common themes are here: Health problems are largely if not entirely due to some external factor that is harming the bodies natural good health or self-healing ability. All you have to do is remove X from your body and your problems will go away.

X is often an unnamed toxin or "chemical", but it can also be the wrong kind of food, electromagnetic waves, a neglected infective organism (Lyme, Cadida), or something more mysterious. It doesn't really matter, just use your imagination. If you get stuck, however, toxins are a good default.

Here is the list of symptoms and disorders treated:

- Electric sensitivity (electric sickness or electric hypersensitivity – from mild to severe stage),

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00

- chemical hypersensitivity (from mild to severe stage),
- Sleeping Disorders,
- Stress and chronic stress, chronic fatigue,
- Fibromyalgia,
- Adrenaline Syndrome,
- Acne,
- Bronchitis,
- Snoring,
- Nervousness,
- Headaches,
- Migraines,

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00

- Allergies,
- Cystic Fibrosis,
- Arthritis,
- Cough,
- Depression,
- Emphysema,
- Low Immune System
- Low Energy
- Overweight
- Back Pain
- and more.
Don't forget "and more," you don't want to limit your potential customer base. All the common symptoms of life are here, with some strangely specific ones thrown in (cystic fibrosis, really?).

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00

(Also, I added the last three because they are very common but were missing from this particular list.)

"My invention is focused on origin of developed health problem. In other words – if you will treat only symptoms instead of taking care of the problems leading to them than therapy will be less effective and in some cases will not provide expected results."

Yes, make sure you don't just treat the symptoms like modern reductionist science-based medicine. You need to treat the fake, made-up cause of illness that I invented or just copied from someone else.

This is often the most ironic claim of such scams, because science is the only endeavor that actually seeks to find the underlying cause of illness and disease, and to direct treatment based upon such knowledge. We cannot always do this, and so we combine such therapeutic approaches with symptom management. Ask anyone in chronic pain if they think symptom management is important.

The goal is to cure whenever possible, failing that to prevent or modify the course of disease, and to manage symptoms to optimize quality of life. These things are not mutually exclusive, they are all part of modern medicine. Beware anyone selling snake oil who claims that mainstream medicine "only" treats symptoms, or that they can treat the "true cause" of illness.

Irony also derives from the fact that many such alternative systems, like homeopathy, are based entirely on addressing symptoms.

Now you need a villain. If your treatment is so revolutionary and effective, why isn't everyone using it? Well, Big Pharma, of course (always a good go-to villain). But there are other very useful villains that you can use to scare people toward your treatment.

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00 Insurance companies don't want to pay for this treatment. Doctors want to keep you sick. Professional organizations just want to protect their monopoly, and are in the pocket of Big Pharma anyway. The government is all corrupt. You can't trust anyone - except for your friendly neighborhood snake oil salesman. If you want to incorporate a device into your snake oil, then you need to point out that it is patented (as if this is synonymous with scientifically validated -it isn't). "As I mentioned above my invention is unique. This is proved by granted patents. It means that nothing like that is available on market and my invention exceed today's knowledge." You can also mention that your device is "FDA cleared" - referring to the FDA is likely to fool many people into thinking that your claims have been FDA approved when they haven't been. The FDA also clears medical devices as safe and doing what they say they do, without reviewing or approving specific applications of those devices. Further, sprinkle your claims with as many fallacious appeals as you can. You can appeal to antiquity (based upon ancient wisdom), appeal to popularity (millions sold), appeal to authority (celebrity sponsors are useful for this), and (the ever popular) appeal to nature.

"My natural treatment, based upon ancient practices, works gently with your body to naturally heal itself. It has been used by many for years, including this famous celebrity. Just look at this

Written by Dr. Steve Novella

Saturday, 22 December 2012 09:00 attractive person is a white lab coat." Finally, back up your claims with anecdotes. If you have a website, then have a page dedicated to many glowing anecdotes for how wonderful and effective your treatment is. If you are ambitious and have the proper background or resources, you can even try to refer to research. This can be a bit tricky, but here are some pointers. Do a Google (or even better, PubMed) search on terms related to your treatment. Find some complex basic science research that refers to terms that you use (or just pick some technical terms you find and add them to your copy). Then link to that research and claim that the findings support your therapy. Don't bother reading the study - you probably won't understand it anyway. If this seems like too much work, then just pick at random from the following terms and add them anywhere into your claims: Quantum Nano Vibration **Fields** Anti-oxidant Free radicals

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00
Blood flow (or just "flow")
Healing
Balance
Magnetic (or electromagnetic)
Frequency
lon
Energy
Here's an example: "Our patented ionic treatment works at the nano scale to balance vibrational frequencies and improve the flow of healing energy."
Try it for yourself - it's like poetry. Just make sure it sounds good.
Oh, and one other thing. Before attempting to employ this system for generating your own snake oil business, first you have rid yourself of any morals or self-respect. Apparently this is much easier for some people than for others.

Written by Dr. Steve Novella Saturday, 22 December 2012 09:00

Steven Novella, M.D. is the JREF's Senior Fellow and Director of the JREF's Science-Based Medicine project.