

Homeopathy -- June 16, 2019

What is it?

Homeopathy is a system of alternative medicine created in 1796 by Samuel Hahnemann. It's based on the principle of "like cures like", with the premise being that a substance that causes the symptoms of a disease in healthy people will cure similar symptoms in sick people.

Homeopathic solutions involve many repetitions of dilution, typically continuing to the point where the solution is unlikely to contain even a single molecule of the original substance. These extremely dilute solutions are believed by homeopaths to retain a "memory" of the original substance.

The effectiveness of a homeopathic solution is determined by a testing process called a "proving".

Let's break these down.

Like Cures Like

Hahnemann based this upon the fact that cinchona, a flowering plant used at the time as a treatment for malaria, actually induces symptoms similar to malaria. This is an example of assuming a (invalid) causal relationship for correlated events, and is a common logical error.

Correlation occurs when two events coincide with one another, but one is not necessarily influenced by the other. A causal relationship describes two events where one does influence the other.

A good (and humorous) example of a correlation without a causal relationship is the fact that, as the number of pirates has declined, global average temperatures have risen. If you were to postulate that the decline in pirates is causing the rise in temperature, you'd be establishing a causal relationship between the two. Since there's no evidence to suggest such a relationship, it's simply a correlation.

Dilution

Homeopaths believe that the more dilute a solution is, the more effective it is. There is no evidence to suggest that diluting a substance makes it more effective.

Hahnemann established something he called the "centesimal", or "C", scale, wherein a substance is diluted by a factor of 100 at each step. For example, a 2C solution would mean that the original solution was diluted into 99 parts non-solution (usually water or alcohol), a 3C solution would be a 2C solution further diluted by an additional factor of 100, and so on.

With no understanding of molecular/atomic structure, Hahnemann assumed that solutions could be diluted indefinitely, and advocated for 30C dilutions for most purposes. In reality, at about 12C, the solution is unlikely to retain even a single molecule of the original material.

Proving

Proving is simply the evaluation and testing of a homeopathic solution to determine its effectiveness. This is often compared to a clinical trial, but while a clinical trial is “blinded”, testing by proving is purely subjective, and subject to human error and bias. A clinical trial is blinded in that:

- Subjects don’t know if they are receiving real medicine (active group) or a placebo (control group).
- The persons delivering the tests also don’t know if they are real or placebo.

When tested in actual clinical trials, homeopathic solutions show effectiveness no greater than placebo. Why do they seem to work?

There are a number of factors. The most common include:

- The **placebo effect** refers to an alteration of your perception of symptoms based on your “belief” in the effectiveness of a treatment. Pain treatment is a good example. When a person takes an inert substance that they fervently believe will reduce symptomatic pain, they actually perceive less pain.
- **Unassisted healing**. Many conditions resolve naturally over time.
- **Unrelated treatment**. An unrelated food, exercise, other medicine, or other factor may have influenced the healing process.

What’s the harm?

If homeopathic solutions give a person peace of mind, what’s the harm? A couple of things:

- You’re being sold an unregulated, sham product. Homeopathic solutions cost almost nothing to produce, and they are sold at considerable markup. Further, with no regulation, the solution could be adulterated with foreign, unrelated substances.
- The homeopathic treatments might be used instead of actual effective treatments for dangerous conditions. As an example, one of the most popular homeopathic treatments is Oscillocochinum, sold as a treatment for influenza. Influenza can be dangerous, even life-threatening. By foregoing effective treatment, you’re putting yourself at risk.

Bottom line? When you’re sick, seek proven treatment!

You know what they call alternative medicine that’s been proved to work? Medicine.

Tim Minchin

From:
<https://blog.devtoprd.com/> - Jim's Blog

Permanent link:
https://blog.devtoprd.com/doku.php?id=posts:2019:2019.06.16_-_homeopathy&rev=1704155419

Last update: 2024/01/01 16:30



