

How Does Homeopathy Work?

To respond to the question of how homeopathy works, we must first clear away some of the misperceptions people have about how conventional medicine works.

For starters, most people believe that successful medical treatments come from a detailed understanding of *how* treatments work. It turns out that most medical discoveries still result from a combination of observation, trial and error, guesswork and luck. Decades can pass before science catches up with those discoveries and offers theories about why they work.

The Washington Post reports in "One big myth about medicine: We know how drugs work" that "[k]nowing why a drug works has historically trailed the treatment, sometimes by decades. Some of the most recognizable drugs—acetaminophen for pain relief, penicillin for infections, and lithium for bipolar disorder, continue to be scientific mysteries today."

The idea that highly dilute preparations of common herbs and minerals can elicit a healing response from the body met with opposition almost as soon as Dr. Samuel Hahnemann, the father of homeopathy, proposed it in the late 18th century. The oldest surviving national professional medical association in the United States is the American Institute of Homeopathy. The second oldest is the American Medical Association. The AMA was formed explicitly (at least in part) to discredit and undermine homeopaths and homeopathic medicine primarily because they took business away from the practices of medical doctors.

That institutional antipathy remains today even though many medical doctors now use homeopathy as an adjunct to their practices. So, why do they?

The simple answer is that homeopathy works. Doctors and other health care practitioners see it work every day in their practices, and this is why they keep on using it.

What the Critics Say (and Don't Say)

Informed critics of homeopathy are careful to say that homeopathy *can't* work. They rarely say that it *doesn't* work because they know that in study after study homeopathy has been shown to provide results beyond what is called the placebo effect. (More on the placebo effect later.) What those critics mean—though they are rarely explicit—is that according to the narrow biomedical model they are using homeopathy *shouldn't* work.

But it turns out that modern medicine uses a variety of models. Physicians tend to be a practical lot and are more concerned about results than explanations. Psychiatrists, not surprisingly, include psychological factors when diagnosing their patients. In fact, physicians now incorporate what we know about the effect of psychological factors on health when discussing lifestyle and attitude changes with their patients. But all of this is strictly outside the narrow biomedical model which says that the body is a bioelectromechanical machine that only responds to surgical and (concentrated rather than dilute) chemical interventions.

More and more, however, this model has shown itself to be too circumscribed. Community medicine, for example, looks at environmental, occupational, socioeconomic, educational and public health factors in the whole community in determining the causes and best treatments for disease. It also emphasizes prevention.

Homeopathy Works by a Different Model

The most important thing to know about homeopathy is that it uses a different model of human health and illness. Many years of practice have shown this model to be consistently effective in treating patients with a variety of illnesses and injuries.

Homeopathic practitioners work more like those in community medicine, looking at a broad array of physical, emotional, dietary, occupational and environmental factors in evaluating patients. The closest analogy in conventional medicine today is what is called "patient-centered care." Like medical doctors who practice patient-centered care, homeopathy practitioners want the whole picture. Once that picture is complete, those practitioners scout the homeopathic literature to match the patient's situation with the appropriate medicine.

There are several explanations for how homeopathic medicines work. The general explanation is that they stimulate the body's natural healing (homeostasis) responses and that this is what cures the patient or at least improves his or her condition. This is consistent with what is widely known by scientists as hormesis, a pharmacologic phenomenon in which a low dose of a toxic substance causes a stimulatory effect even though a high dose of the same substance causes an inhibitory or toxic effect.¹

We know that the human body has the power to heal itself. We get a minor cut and the damage is repaired within a few days. Even recovery from a major injury such as a broken bone requires the body's natural ability to heal itself, in this case by knitting the bone back together. Homeopathy hastens this process or unblocks it where it has become blocked. This accounts for the counterintuitive result seen in many cases in which symptoms temporarily worsen, known as a homeopathic aggravation. Practitioners believe that the body's symptoms are by and large manifestations of the body's attempt to heal itself. Because pharmacologic drugs often block these symptoms, they can actually slow down the healing process.

The Healing Response

Just how does homeopathy elicit the body's healing response? The father of homeopathy, Dr. Samuel Hahnemann didn't have the scientific tools and language we have now, and his theory about how homeopathy works was based on a primitive understanding of the body and the immune system. Many medicines in his day were used because of their clinically observed effectiveness without what we would call a scientific explanation to back them up. But, that's something that is still prevalent today (as discussed above).

While all homeopathic medicines are dilute solutions, many still retain enough of the active agent to have an effect on the body though not what that agent would have were it to be concentrated. Some medicines are so dilute that there must be another explanation for their action.

Until recently it was thought that homeopathic medicines beyond a certain dilution contained none of the original molecules of the active ingredient. The efficacy of homeopathy for these medicines was put down to "water memory" of the molecules remaining in the medicine, an idea rejected by critics.

More recently, researchers using powerful electron microscopes have discovered that nanoparticles of the active ingredient remain in extremely dilute homeopathic medicines. How these nanoparticles impart healing effects is unknown at this time, but researchers have offered various explanations.²

Outside of homeopathy we do have a model in which doses of agents known to cause symptoms impart lasting and powerful changes in the body: vaccines. No one can yet claim that homeopathy uses the same mechanisms. But the fact that such a model already explains the efficacy of giving people weak doses of something that would otherwise make them sick in order impart immunity provides a well-demonstrated biological analog for the principle behind homeopathy.

A practice used by some allergists provides another analogy. These allergists give small doses of allergens to their patients to desensitize them to allergens in the environment.

As we have explained, the fact that we cannot pinpoint the mechanism by which homeopathy works doesn't disqualify it as a mode of treatment. Homeopathy simply remains one of a myriad of clinically successful treatments that await the day when they will be better understood.

The Placebo Effect

When medical science doesn't understand how a treatment works but finds that it does, it often puts it down to what is called the placebo effect. Here's the most important thing you need to know about the placebo effect: There is no definitive agreement in the medical community about why it occurs, but it is a very real effect. And, while there are

many theories and findings, none of them have reached the level of widespread acceptance.

Technically, a placebo is a harmless substitute for a drug being tested in a double-blind clinical trial. The substitute is often a sugar pill. In such a trial neither the patient nor the physician knows whether the pill contains the drug being tested; hence the term "double-blind."

Quite often, the condition of patients taking the placebo improves even though they did not take the drug. Researchers conducting the trial must show that those who actually receive the drug improve more and/or in greater numbers than those taking the placebo if the drug is to be considered effective.

Most people believe that the placebo effect has to do with how the human mind affects the body. They think the belief that one is being treated triggers a healing response in the body. There is some evidence for this in certain circumstances (notably pain relief), but it remains only a hypothesis for other areas and needs further study. Technically, the placebo effect merely refers to the amount of improvement in a patient that cannot be accounted for by the action of a treatment. It is an admission that the cause for the improvement is unknown.

To say then that patients given homeopathic medicines improve because of the placebo effect is merely to say that we don't know the mechanism by which those patients improve. Large meta-analyses of double-blinded homeopathic studies have concluded that the homeopathic response is not a placebo effect. To assume that the improvement is exclusively a product of a positive mental state is simply inaccurate.³

Furthermore, patients quite often seek homeopathic treatments after conventional medical interventions have failed to produce improvement and may have even resulted in unpleasant or dangerous side-effects. Some patients subsequently seek alternative treatments other than homeopathy before trying homeopathic medicines. That the placebo effect has not been induced as a result of previous interventions in these patients suggests that any subsequent improvement resulting from homeopathy should not be assigned to the placebo effect.

Finally, there is the success of homeopathy in veterinary care, agriculture (plants), the treatment of infants, and in people who are unconscious or in a comatose state in an intensive care unit. It is difficult to understand how the power of suggestion could be a factor in successful homeopathic treatment in any of these circumstances.

¹ Mark P. Mattson, *Hormesis Defined*, U.S. National Library of Medicine, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2248601/

² Bell IR, Koithan M. *A model for homeopathic remedy effects: low dose nanoparticles, allostatic cross-adaptation, and time-dependent sensitization in a complex adaptive system*, BMC Complement Altern Med. 2012;12(1):191. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3570304/

³ Linde K, Clausius N, Ramirez G, et al, *Are the clinical effects of homeopathy placebo effects? A meta-analysis of placebo–controlled trials.* Lancet 1997; 350:834-43. https://www.ncbi.nlm.nih.gov/pubmed/9310601