



[REALITY IS THE BEST MEDICINE] HARRIET HALL

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Ayurveda: Ancient Superstition, Not Science



Alternative medicine includes modalities such as acupuncture and chiropractic that are widely accepted despite the evidence for their effectiveness being far from convincing. It also includes lesser known systems of treatment. In the United States, the practice of Ayurveda is not licensed or regulated by any state, although Deepak Chopra has done much to publicize it. It is featured in textbooks of naturopathy and employed by various practitioners of “functional medicine” and “integrative medicine.”

You may ask:

- Can I assume Ayurvedic remedies are safe?
- Has their effectiveness been

established scientifically in well-designed clinical trials?

- Does the underlying rationale make sense?

The short answers to these questions are no, hardly ever, and no way!

Ayurveda is a system of medicine that originated in India and is still popular there. Eighty percent of the population of India and Nepal use Ayurveda. If Ayurvedic medicine is really effective, one might expect that Indians and Nepalese would be healthier and live longer than followers of other medical systems. They aren't, and they don't. (Admittedly, other factors may come into play, such as genetics and socioeconomic factors.)

The concept of “ancient wisdom” implies that any treatment that has been

around for centuries and is still being used *must* be effective, or people would have stopped using it. This is not so. Astrology is ancient, and people still believe in it. They consult horoscopes to guide their lives. Psychology has many explanations for why people may persist in believing things that are not true: peer pressure, custom, false attributions, irrational hope, selective memory, confirmation bias, and much more. Astrology is not ancient wisdom; it's ancient nonsense with no basis in reality.

Ayurveda is prescientific and, by definition, prehistoric. History only began when people started writing things down. Ayurvedic beliefs were transmitted orally for centuries before they were put in writing. Its three main

texts were originally thought to date back to 600 BCE, but recent historians believe they were written between the second and fifth centuries CE. That makes them obviously prescientific; science is a recent development. For most of human existence, we had no systematic way to test our beliefs against reality.

Ayurveda's origin is basically religious. "Ayurveda is said to be an eternal science that first existed in the universal consciousness (Brahma) before it was passed from the creator to the ancient Indian mystics through meditation" (National Ayurvedic Medical Association N.d.a).

Early thinkers tried to make sense of their world and categorize things. They correctly guessed that the things they saw might be made up of things they couldn't see, but they didn't know about atoms, molecules, or the periodic table. The ancient Greeks imagined four humors: blood, black bile, yellow bile, and phlegm. They thought the humors explained different human personality characteristics (for example, melancholy was caused by an excess of black bile) and associated them with the four elements of earth, fire, air, and water; the seasons; and the qualities of hot, cold, wet, and dry. The ancient Chinese imagined that five elements (wood, fire, earth, metal, and water) were the basic components of everything in the universe. They classified people by their predominant elements and thought the elements determined personality traits.

The ancient Indians imagined five great elements (ether, air, fire, water, and earth), and Ayurveda groups them into three basic types of energy and functional principles: the doshas Vata, Pitta, and Kapha. Each dosha is subdivided into five types. For instance, Sadhaka Pitta, located in the heart, "governs emotions such as contentment, memory, intelligence, and digestion of thoughts." And Kledaka Kapha, located in the stomach, "governs moistening and liquefying of the food in the initial stages of digestion" (National Ayurvedic Medical Association N.d.b).

Each dosha comprises two of the five basic elements, which each have specific qualities (University of Minnesota

N.d.). These elements are:

- Space (associated with expansiveness)
- Air (associated with gaseousness, mobility, and lack of form)
- Fire (associated with transformation, heat, and fire)
- Water (associated with liquidity and instability)
- Earth (associated with solidity and stability)

Furthermore, each dosha is associated with a specific bodily "build" or shape and is linked to certain personality traits. Ayurveda also links each dosha with particular types of health problems (University of Minnesota N.d.).

The National Center for Complementary and Integrative Health (NCCIH, formerly NCCAM) is usually supportive of alternative medicine and funds clinical trials to study it, but its information page on Ayurveda is pretty negative. It says that although 240,000 Americans use Ayurveda, "only a small number of clinical trials using these approaches have been published in Western medical journals ... and few well-designed clinical trials and systematic research reviews suggest that Ayurvedic approaches are effective" (National Center for Complementary and Integrative Health N.d.). The studies they list suggesting benefits for arthritis, diabetes, and ulcerative colitis do not inspire confidence. They are small, preliminary pilot studies that have not been replicated. One study had only ten subjects. The NCCIH questions the safety of Ayurveda, pointing out that many Ayurvedic preparations contain toxic levels of heavy metals.

Symptoms are commonly associated with an imbalance of doshas. Excess Vata is said to cause mental, nervous, and digestive disorders, including low energy and weakening of all body tissues. Excess Pitta causes toxic blood to give rise to inflammation and infection. Excess Kapha is associated with an increase in mucus, weight, edema, and lung disease. Ayurveda claims to improve health by balancing the doshas. There is no evidence to support those claims. Even the categorization of doshas is suspect. I took three online quiz-

zes that promised to tell me what dosha I was, and I got three different results.

The National Ayurvedic Medical Association (NAMA) says:

Leveraging these basic principles, Ayurveda customizes preventative wellness to the unique constitution of every individual. ... In addition, Ayurveda offers one of the world's most comprehensive cleansing protocols, known as panchakarma. This ancient practice uses five primary therapies to release and eliminate accumulated toxins from deep within the tissues, and return the doshas to their proper seats in the body. (National Ayurvedic Medical Association N.d.b)

NAMA claims that Ayurveda is a science, "the science of life," that "work[s] to harmonize our internal and external worlds" (National Ayurvedic Medical Association N.d.b). But no scientific evidence is to be found on their website.

And it gets even sillier. Here's a description of Ayurvedic texts from Quantum Publications' 1995 catalog:

Ancient Ayurvedic texts describe each herb as a packet of vibrations that specifically match a vibration in the quantum mechanical body. All bodily organs, for example, the liver, the stomach and the heart are built up from a specific sequence of vibrations at the quantum level. In the case of a malfunction, some disruption of the proper sequence in these vibrations is at fault. According to Ayurveda, a herb exists with this exact same sequence, and when applied, it can help restore the organ's functioning. (qtd. in Barrett 2012)

There is no good evidence that Ayurveda is effective for treating any disease (Cancer Research UK N.d.). Early practitioners very likely stumbled on some effective treatments just by chance, but without scientific testing we have no way of knowing which ones.

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Safety Questions

In addition to the indirect harms from delaying or rejecting effective science-based treatments, practicing Ayurvedic medicine presents direct harms. Deepak Chopra's Sharp Institute was sued in 1995 (Barrett 2012). Chopra had performed pulse diagnosis on a patient and provided a mantra for "quantum sound treatment," and another Institute employee (Triguna, who was not a licensed health care practitioner) prescribed various Ayurvedic treatments. Triguna told the patient his leukemia was gone, but it wasn't; he died of it four months later (Barrett 2012).

Numerous studies have found that 20 percent or more of Ayurvedic medicines contain toxic levels of the heavy metals arsenic, lead, and mercury. And a 2015 study found elevated levels of lead in the blood of 40 percent of users. Numerous cases of lead poisoning due to

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Ayurvedic remedies have been reported in the medical literature (Barrett 2012).

Ayurvedic treatments include advice about diet, rest, specific medications, herbal remedies, massage, meditation, yoga, bowel cleansing (enemas, forced vomiting, laxatives, etc.), oil pulling, tongue scraping, eye washing, sneezing powders, leeching, bloodletting, cupping, and much more.

According to Kurt Butler, author of *A Consumer's Guide to "Alternative Medicine"*:

The beliefs and practices of Ayurvedic medicine fall into three categories: (1) some that are obvious, well established, and widely accepted by people who have never heard of Ayurveda [e.g., relax and don't overeat]; (2) a few that proper research may eventually prove valid and use-

ful [herbal remedies may contain useful drugs, but their dangers and limitations often have not been scientifically investigated]; (3) absurd ideas, some of which are dangerous [e.g., that most disease and bad luck is due to demons, devils, and the influence of stars and planets; or that you should treat cataracts by brushing your teeth, scraping your tongue, spitting into a cup of water, and washing your eyes for a few minutes with this mixture]. (Butler 1992)

Ancient Indian Surgery

It wasn't all bad. Ancient Hindu doctors were good surgeons. They introduced plastic surgery techniques to rebuild the noses of people whose noses were amputated to punish adultery. They removed bladder stones. They drained abscesses, did skin grafts, removed foreign bodies, splinted fractures, sutured wounds, performed amputations, and repaired anal fistulas. They even did Cesarean sections, saving the babies (but not the mothers). They treated cataracts by "couching," displacing the lens to improve vision. Couching has been described as "a largely unsuccessful technique with abysmal outcomes." For some patients, it improves the ability to sense light and movement, but patients still need powerful prescription lenses, and 70 percent of them are left effectively blind (Couching [ophthalmology] 2020).

Dosha-Based Diets

Not surprisingly, Gwyneth Paltrow's reprehensible Goop website has extensive information on Ayurveda and elaborate instructions on how to eat for your dosha. The information comes from Paltrow's Ayurvedic doctor consultant, known only as Dr. Chandan. Vata types are said to be spacey and anxious with active minds. Their qualities are "cold, light, irregular, rough, moving, quick, and always changing." They love excitement and new experiences, are lively conversationalists, and quick to anger but also to forgive. They have a thin, light frame and cold hands and feet; they also sleep lightly and have sensitive digestion (Chandan and Sharma N.d.).

Vatas are advised to have regular

Ayurvedic massages, keep warm, get enough sleep, and minimize travel. Because Vata is a cold and dry dosha, warm, nourishing foods are good, including warm milk, cream, butter, warm soups, stews, hot cereals, fresh baked bread, raw nuts, and nut butters. Vatas should take a hot or herbal tea with snacks in the late afternoon. All sweet fruits are okay, as are spices, including cinnamon, cardamom, cumin, ginger, cloves, and garlic. To be avoided: cold foods, salads, iced drinks, raw vegetables, greens, unripe fruits (which are too astringent), too much caffeine, and candies. All dairy is acceptable. The best grains are cooked oats and rice. The best meats are chicken, seafood, and turkey in small quantities (Chandan and Sharma N.d.).

Ayurveda is a tribute to the imagination of early thinkers who tried to make sense of their world. But if you believe that reality matters, prescientific and prehistoric imaginings are not a rational choice for health care. ■

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