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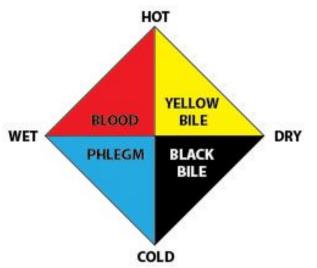
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## Herbalism and the Four Humors

Modern medicine today has a very simplistic type of process; if one is sick or injured they would go to see a doctor who will examine them and prescribe a course of treatment to tend to the ailment or injury the person is experiencing. However, different approaches to medicine and treating someone who is sick or injured has evolved immensely over the course of time. One specific approach that is rather interesting is the four humors. From 460 BC until mid eighteen hundred the theory that is Humorism was the basis for medicine. The four humors are: blood, yellow bile, black bile, and phlegm, each of these were seen as a system of medicine that broke up the working and makeup of the human body.



**Figure 1:** A visual representation of the four humors and how they would be categorized.

How each of these humors connect to medicine is through the theory that goes along with the belief that the body is made up of these four humors. This theory was quite complex due to the fact that if one were to get sick it was seen as a consequence of one losing or having an excess of one the body's four humors and in order for someone to get better they would need to restore the missing humor or get rid of the excess humor. In order to do this diagnosing (just like medicine today) was a key factor in figuring out which humor there was a lacking or excess of in the patient. The symptoms of one having an excess or lack of a humor are: evacuation phlegm, bleeding, induced vomiting, excessive sweating, or intestinal laxation. In order to restore the humors that were lost, it was prevalent that the patient was fed substances that were able to generate one of the four humors (blood, black bile, yellow bile, and phlegm), doing this lead to herbalism which could be different in every culture, however, it is important to understand the origin of the four humors.

The ideology of the body having four humors and the sick or injured having either a lack or an excess of a humor being the cause of disease originated from the "Father of Medicine" Hippocrates. Hippocrates was a Greek Physician who was born around 460 BC, he made amazing contributions that could be considered ahead of his time since most of his findings were not taught or implemented in medical practices during his time since they were considered to be too advanced. Since this ideology of the four humors originated from Hippocrates it is important to note that this was a way of life for him and in some way, his life's work: "The Greek eurythmia, which Hippocrates turned into a way of life, was, for the medieval man, a combination of internal liquids; disease could only be explained as the body's excess or lack of one of the humors" (44 Saladña). All of these findings and theories based on the four humors lead to herbal medicine as a treatment which also made its way to Latin America.

Herbal medicine is the study or practice of the medicinal and therapeutic use of plants which can also be called herbalism. The concept of herbal medicine was quite complicated back

then due to the fact that the physical properties of these medicinal plants needed to be known in order to correctly prescribe them. The way in which these properties were determined was by rubbing the plants between one's fingers, eating them, smelling them, amongst other techniques of figuring out the properties of the herb. The specifics of knowing which herbs treated which ailments and what it did to treat it, was very much a science back then and still very much is today, however, when studying about which plant does what, Saldaña's book perfectly describes that: "Bitter plants induced vomiting; dry and warm plants were laxatives; moist and dry ones stopped diarrhea; cold and dry ones moved bile; and so on. There was an emphasis on hot flavors, on the urtication produced by juices on mucus, on the smell of latex and resin, the consistency of oils and mucilage, to, in the end, incorporate them into a medicinal classification that recognized the four categories—"cold," "hot," "dry," and "moist"—that combined with their philosophical equivalents—"phlegm, choler, melancholy, and blood." (44 Saladña). Interestingly, there are different ways in which one can pair up the four humors and their philosophical equivalents and treat the patient along with their ailment one perfect example of this is the use of cacao in Latin America: "First, cacao, without being toasted or prepared in any way, has the property of constructing the bowels stopping menstrual periods, closing urinary tracts, obstructing the liver and especially the spleen, depriving the face of its vivid, natural color, weakening digestion, causing paroxysms and fainting, and, in women, blushing, female problems, and above all, it engenders perpetual anxiety, melancholy and heart murmurs" (45 Saladña). The fact that it was possible to connect both the physical and mental symptoms could be seen as ahead of its time (just like Hippocrates theories), the reason for this is that when looking at the sociology of human beings, mental health has not been a big public health issue since recently.

Herbalism in Latin America ranges from boiling tree leaves, grinding beans, to eating tree bark. There are a plethora of different kinds of diseases that were treated through herbalism, one of those diseases being syphilis. "Syphilis is a bacterial infection usually spread by sexual contact. The disease starts as a painless sore — typically on your genitals, rectum or mouth. Syphilis spreads from person to person via skin or mucous membrane contact with these sores" (Mayo Clinic). Since syphilis was such a substantial problem in Latin America, explorers began to frantically look for new remedies in order to get this outbreak under control, especially since they did not know where the origin of all of these syphilis cases were coming from at the time. The two main herbs that were used to treat syphilis were chinaberry and sarsaparilla: "The bark of a chinaberry and the root of a sarsaparilla would be the two stellar products for treating syphilis in the sixteenth century and produced a commercial fever up to then unknown. In a few years, chains of specialized clinic-like establishments appeared with the sole purpose of preparing this curative potion and treating patients with syphilis" (46 Saldaña). The use of these two herbs is really interesting due to the fact that they were able to help those who were suffering from syphilis.



**Figure 2:** A visual representation of the chinaberry bark and the sarsaparilla plant.

The next disease that was treated herbally was Dysentery. Dysentery is an: "intestinal infection that causes severe diarrhea with blood. In some cases, mucus may be found in the stool" (Healthline). The treatment that was used for dysentery is quite odd due to the fact that

one of the treatments was to scare the patient in order to cure their dysentery. However, there were a myriad of different treatments that were also used; one of them being: "to remove the heat from fresh horse manure and drink it, or to squeeze the same manure mixed with wine and drink it, or to put a dry cupping glass on the back of the neck, or to gulp watered down vinegar, or to put a stone drenched in blood in the patient's hand, or to drink dog urine with wine, or ground pig's feet with wine" (48 Saldaña). There were also herbal treatments for bone breaks. These treatments are very interesting due to the fact that if they were to be used now, it would be seen as extremely unconventional: "In case our spine or ribs or any bone may be harmed. First the bone must be pushed, stretched, and reset. Immediately afterward, the *zacacili* root must be cut, put in a thick poultice, and the injured part splinted. If there is swelling around it, it is pricked with an obsidian knife and *iztaczazalic* is applied in the swelling mixed with a *tememetatl* root" (49 Saldaña). There is also another treatment that was used to aid broken ribs: "Dry ground goat manure baked with wine is to be plastered onto the broken ribs" (48 Saldaña).

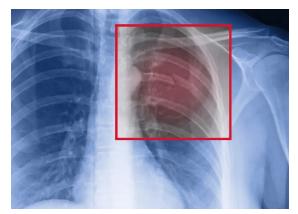


Figure 3: A visualization of a broken rib. Today with modern medicine the usual treatment for a broken rib is to leave it alone and take NSAIDS (anti inflammatory pain medication), after about two months the rib should have healed on its own.

Summarily, herbalism in Latin America has a very wide variety of treatments for different kinds of ailments and injuries. All treatments that have been discussed are different ways the people of Latin America treated the patient. The way these treatments worked is through the four humors since the main goal of the treatment was to either restore the humor the

patient was missing or get rid of the excess humor the patient had acquired. The science behind this herbalistic approach mainly had to do with the symptoms the patient had and what the herb did. An example of this would be if one presented with having constipation, they would then be "prescribed" a herb that was warm and dry since those types of herbs were seen as a laxative. Today herbalism still has a big presence in the Latino culture, one example of this is the use of the yerba buena plant. The remedy for this herb is to cut a few leaves off the plant and boil them for about ten to fifteen minutes, this then creates a tea which helps with stomach troubles such as bloating, stomachaches, and even constipation and diarrhea. Therefore, from the curation of the ideology of the four humors by Hippocrates, to the linking the four humors to herbalism in Latin America, medicine has truly evolved in so many different ways and still manages to incorporate theories and findings of those who came before us.

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