Early Indians Contributed Much To Modern Medicine

by Cheryl Tolino

Knowledge of drugs and treatments of Native Americans has served to enlighten modern medicine. However, the value and extent of this knowledge is rarely credited to these people who were often termed “savages” by the early arrivals to the American shores.

The arrivals shrank from the notion that an “uncivilized” race might have something to teach them. Consequently, “Indian medicine” long remained the last resort of the explorer and frontiersman.

When the Indian discoveries were finally tapped by scientific medicine, much was found to be of value. Even recent discoveries have helped to open new frontiers in medical history.

One example includes the Peruvian Indian’s knowledge of the narcotic effects of coca leaves. They knew hundreds of years before 1834 when Carl Koller established the value of cocaine as a local anesthetic. Dr. Frederik Banting, discoverer of insulin, credited Indian healers with the “pharmaceutical spadework” which led to it.

Another example is the Indian drugs that were used to suppress ovulation, hence controlling the menstrual cycle. This bit of knowledge started researchers on the road towards “the pill.”

History also records how during the bitter winter of 1835-36, the three ships of Jacques Cartier were frozen in the ice of the St. Lawrence River near the site of Montreal. Isolated by four feet of snow, the company of 100 men survived on the fare stored in the holds of their ships. Soon scurvy was so rampant among them that by mid-March, 25 men had died and the others were near it.

As a last resort, Cartier noticed magaia, who had cured himself of the same disease earlier with the “juice and sap of a certain tree.” The Indian women gathered branches of the magical tree, “boiling the bark and leaves for a decoction, and placing the drugs upon the legs.”

All the men were cured.

Cartier’s conclusion was if the physicians of Alexandria had been there with their numerous drugs, “they would not have done so much in one year as the tree did in six days, for it did prevail that as many as used of it, by the grace of God recovered their health.” The “magical tree” was a Sassafras tree.

Other accounts include Indian medical services to whites due to the scarcity of trained physicians and basic distrust of the profession. The unavailability of conventional drugs and medicines also influenced the whites to seek help at the hands of the Indians.

At other times, the Indian’s knowledge was all that was available. One account was recorded by a young Scot from just after the turn of the century concerning a cure performed by an Indian woman doctor in Canada.

Before coming to Canada, the young man had accidentally driven a nail into the palm of his left hand and the wound had never healed completely. While he was crossing an ice-covered stream in Manitoba with a team of horses, the ice broke beneath him, and he fell in.

The next day the left arm became very painful as it began to swell. He reasoned that the dip in the water might have resulted in blood poisoning. The nearest doctor was at least 70 miles away, and in much pain the young man set out on horseback to reach him.

On the way his suffering became unendurable so he stopped placed him near the fire while a pot of water was set to boiling. An old woman carefully rolled up his sleeve and took to rubbing the wounded hand as well as the whole arm.

All the time she was rubbing, other Indian women chanted and formed a circle, surrounding the young man.

He was so engrossed by the women that his attention was entirely taken away from the pain he was suffering. This was, of course, the objective of the women.

The young man became so hot that he “fell into a profuse perspiration.” The old woman then made a poultice from some leaves and bounded it over the hand. The white man was then carried into a tent where he slept for 18 hours. After reaching the doctor, the young man related his experience. The doctor concluded that if the Indian woman had not treated his arm, he might have lost it.

The earliest settlers who

Their prescription was to take dirt from the top of an old grave and heat it in a pan until dry, then apply it to the sores. These remedies indicate, according to some doctors, that “some Indians may have unknowingly stumbled upon the secrets of the healing qualities of antibiotic substances which civilized man finally discovered in the mid-twentieth century.”

In treating rheumatism and arthritis, plains tribes used the dried flowers of false lupine (Thermopsis rhombifolia). The flowers were mixed with hair and burned under the affected part. The San Carlos Apaches made dry poultices of the tops of grease-
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The earliest settlers who landed on the Atlantic shores had some knowledge of European remedies, but as they pushed westward they necessarily had to seek advice from the inhabitants of the area. Many of the educated physicians of the time were slow to recommend any "savage" medical knowledge if by chance his treatment did not work.

Numerous accounts have been recorded favoring the Indian's vast knowledge of drugs and treatments. Because of his dependence upon nature, the Indian keenly observed his natural environment for the structure, habits, and local distribution of plants. His knowledge also developed through his observations and study of animal behavior towards plants.

The Native "botanists" noticed what plants were sought out by animals suffering from wounds and fevers. For example, a wolf that was bitten by a rattler would chew snakeroot; a bear would smear his wound with a spruce or hemlock resin; during a cold spell, a wild turkey would compel her babies to eat the leaves of the spicebush. The Indians also conducted limited ex-
Health Excellent Among Early Indians

By Cheryl Tolino

As early Europeans settled various regions of the North American continent, their observations concerning the health of the American Indians were very favorable.

They noticed the relative good health and absence of deformity among the natives. Perhaps one accountable reason for Europe’s high reflection of disease was its urban centers and higher population density openly exposed to contagions which were unknown in America.

Columbus was the first to remark about the absence of deformity among the Indians in one of his letters dated in 1493. A few years later, the French essayist, Michel de Montaigne, declared, “...as my testimonies have told me, it is very rare to see a sick body amongst them; and they have further assured me, they never saw any man either shaking with the palisie, toothless, with eyes dropping, or crooked and stooping through age.”

When Boston was still a village on the edge of the wilderness, William Wood remarked of the New England Indians, “I have been in many places, yet did I never see one that was born either in defect or redundancy a monster, or any that sickness had deformed, or casualty made decrepit, save one that had bleared eyes and another that had a wenne on his cheek.” Most of them reached fifty, he declared, before “a wrinkled brow or gray hair bewrayed their age.”

The New England Indians were “tall and handsome timbered people,” who “lived long, even to an hundred years of age,” recorded John Hossely during the same period of time.

The Dutch also recorded the general good health of the Indians. One Dutch from New York remarked that “it is somewhat strange that among these most barbarous people, there are few or none cross-eyed, blind, crippled, lame, hunch-backed, or limping men; all are well-fashioned people; strong and sound of body, well fed, with out blemish.”

To account for this general good health among the natives, many observers suspected that environmental factors, operating through the centuries, weeded out the weaker types in the process of natural selection. Dr. Erwin Ackerknecht, in a study of white captive children among the Indians, concluded that the disease resistance of the Indians “was the effect of continuous natural selection rather than of true racial heredity.”

Another account revealed that deformed or infirm Indian children were put to death among the northern tribes. Hence, mercy killing among some tribes was practiced. As early as 1612-14, the Jesuit priest, Marc Lescarbot, reported that some Canadian Indians let the aged sick die, as a merciful act, and because their nomadic life did not allow for the care of the sick. Another tribe did away with infants who had lost their mothers. These acts were not necessarily cruel but rose from feelings of mercy. They reasoned that death would be preferable.

Flowering dogwood (left) was an American Indian febrifuge while May apple (right) was an American Indian purgative.

White Americans in the late 18th century was estimated at 35 years.

During the last third of the 18th century, travelers continued to report favorably on the physical condition of the Indians. Robert Rogers found the Indian to be “of a hale, robust, and firm constitution.” Jonathan Carver reported the Indians to be free from many of the diseases of “civilized nations.”

However, the Indians were afflicted with illnesses as a result of their way of life. Pains and weaknesses in the stomach and breast plagued the Sioux and other western tribes. Pleurisy, an inflammation of the membrane lining the chest, was a most common disease which they treated by sweating. Paralytic complaints were “very seldom known among them.” Rheumatism was observed by John Lawson as he recorded, “...they have a sort of rheumatism, a burning of the limbs, which tortures them grievously, at which time their legs dom from cholera, typhus, smallpox, and measles.

Cancer was also rare, and even fractures were infrequent. There was no leprosy, or Pre-Columbian syphilis. There was a much greater scarcity than in the white population of many diseases of the skin, of most mental disorders, and of other serious conditions.

Digestive disorders, particularly in children and older persons, pneumonia, arthritis, and nutritional disorders were common among the ancient Indians.

Other archaeological sources indicated that Pre-Columbian sculpors depicted many of the diseases and physical states of their people and the knowledge and skills of their surgeons. These figurines illustrate, among other things, the symptoms of malnutrition, deformity, physical and mental illness, the stages of pregnancy and childbirth, the techniques of amputation, and possibly Cesarian section.

Some of the figures appear to represent individuals suffering from headache, toothache, arthritis and spinal defects, neck pains, endemic goiter, obesity, leg deformation possibly due to calcium deficiency, eye diseases, skin ailments, and perhaps hernia.

The American Indian, by any means, was not immune from all ailments, illustrated well by the devastation of the invading diseases. But he was no more weakly either. His feats of endurance could attest to that as one writer noted, “An Indian makes nothing of dragging a deer of 100 to 150 pounds home through a very considerable tract of forest.”

The fact is that the Indian was spared from most of the infectious and deficiency diseases for a time, at least.

(Source: Vogel, Virgil J., American Indian Medicine, University of Oklahoma press, Norman, Oklahoma, 1970.)
Mexico. Elm bark was also used to treat shot wounds among the southwestern Indians.

For snakebites, Indians sometimes killed the offending snake, cut it up, and applied the flesh to the wound. One doctor, who defended this procedure, argued "the snake himself carries the antidote along with him in his fat."

The Delaware Indians used a plant called lion's-heart (Prenanthes rubicunda) to cure snakebites. They boil the juice in milk and take it inwardly while the leaves are applied to the wound.

The Indians in California applied a light banding between the wound and the heart. The Zunis practice both sucking and the use of a plant called "turquoise flower" for snakebites.

Most of the Indian tribes offered treatment for eye troubles, digestive disorders, urinary complaints, venereal diseases, and others. To protect themselves from the cold and prevent frostbites, the Indians greased themselves with vegetable or animal oils. This practice was started from infancy and used primarily to fill the pores which enabled them to better endure the cold.

The list of remedies and methods of treatment are endless. One can only be amazed at the Indian's knowledge of them.


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Still in another tribe, one observer noticed that the destruction of the handicapped was not deliberate as deformed women in savage tribes did not find husbands. But in most cases, the weaker Indians were naturally eliminated by the rigorous environment as nature came to act the part of an unnatural mother.

Inspite of the native ways of preventing diseases or deformities, the Indians were not a short-lived people, contrary to the popular belief of Europeans as one observer noted.

John Lawson, a North Carolinian, argued that the Indians lived "to as great ages as any of the Europeans," because of their shelter from various diseases brought over by the Europeans—namely cholera and smallpox.

Though it is difficult to determine the life expectancy of early Indians, especially without figures of infant mortality and death rates from accidents and disease, reports of aged Indians are not uncommon. Newspapers revealed many Indians who were reputed to be over 100 years old at the time of their deaths.

During the 18th century, Wilson M. Drogman, a modern scholar and anthropologist, estimated that the life expectancy of aboriginal Americans was about 37 years, plus or minus three years. The life expectancy at birth for rheumatism, a burning of the limbs, which tortures them grievously, at which time their legs are so hot that they employ the young people continually to pour water down them. I never saw but one or two thus afflicted."

The greatest number of disorders were reported by later observers who saw Indians long after their first contact with whites. With the influx of smallpox, the American Indians were hardly prepared for the invading disease brought by the Europeans. History has recorded the decimating epidemics of cholera and smallpox.

Among the Assiniboines, hundreds were nearly exterminated in 1837. It was reported that in 1849, about 200 Cheyenne lodges were wiped out by cholera.

Pestilence swept across the plains like a great grass fire. The Blackfeet, living near the "shining mountains," were hit by smallpox, which destroyed two-thirds of them in 1837 and later returned in 1869-70. Everywhere the story is the same. It seems diseases did more to clear the West for settlement than the calvary.

Besides documental reports of determining the health and disease conditions of the Indians, archaeology with its branch of paleopathology—a study of primitive skeletal remains—is another method. The skeletal remains dating Pre-Columbian times revealed the remarkable free-

Sassafras was used as an Indian remedy adopted by whites as a panacea. It became an important article of early colonial commerce and was used to purify the blood.