

II. Leprosy Through the Ages

A. History of Leprosy

The disease of leprosy has been a scourge of mankind for thousands of years. Through the centuries it has been one of the most dreaded of diseases because of its disfiguring and incurable aspects. First known in Egypt, it did not spread to Europe proper until after the Romans invaded Egypt several hundred years before Christ. While Phoenecian seamen probably spread it to Greece and Mediterranean ports, Roman soldiers brought it back to Italy and then farther into Europe. Occurrences of the disease increased rapidly in England and it became a plague during the Crusades when the warriors brought back enough of the deadly germs to start epidemics. During the twelfth and thirteenth centuries, the disease assumed terrible proportions with possibly a quarter of northern Europe's population being afflicted at one time.¹ Flourishing in the filthy, congested towns of that period, it hit the lower classes hardest, but sometimes could be found in the highest social strata, including sovereigns and clerics.

Although there were physicians available, such a serious ailment as leprosy was considered to be an expression of the wrath of God and was left to the ministrations of priests. Segregation seemed the solution to combat the contagiousness of the disease, whose cause, communicability, or cure were unknown. Throughout history those who have contracted leprosy have undergone extreme hardships. A state of outlawry, worse than that of a criminal, was thrust upon them. Regarded as already dead, the sick were cast out of the cities and forbidden to mingle with the healthy folk. Hampered by strict rules governing their movements, leprosy victims were forced to subsist as beggars, wearing a black cowl and announcing their presence by constant tragic cries of "Unclean!" At that sound, the unscathed would make the sign of the cross and flee or drive the outcast away with stones.

1. John Farrow, Damien the Leper (New York: Sheed & Ward, 1951), p. 89.

It was through the unceasing labors of the priesthood that the lives of leprosy victims were finally made more bearable. Hospitals (leprosaria) and houses were established to feed and clothe the sick. The arrival of another epidemic disease during the Middle Ages--the Black Plague--caused sudden mortality among the general population, but specifically annihilated leprosy victims, who, already weakened, were extremely prone to contracting the plague. By the time the plague ceased in Europe at the end of the fifteenth century, it had decimated the leprosy population. After this the incidence of the disease in Europe declined, due to rising standards of living, heightened resistance and immunity, and stricter health precautions.

From the fifteenth century to Damien's time little progress was made in the welfare of those afflicted with leprosy. Most of the leprosy houses were closed after the plague subsided and those that remained were turned over to civil authorities and became pestholes. Although medical science continued to advance, there was little improvement in hospitals where the few leprosy victims remaining were doomed to die in a grim life imprisonment. There these forgotten people were forbidden any of the amenities of the living. Objects of repulsion, feared by all, they were constantly reminded that the sooner they died the better. Such was the shocking state of most of the world's leprosy institutions when in 1873 Father Joseph Damien de Veuster, a Belgian priest, landed on the rocky beach of one of the world's most notorious lazarettos--the Kalaupapa leprosy settlement on the island of Moloka'i in Hawai'i.

B. Cause and Manifestations of the Disease

1. Discovery of the Bacillus and its Communicability

Leprosy, or Hansen's Disease as it is sometimes called, is caused by a bacillus. Dr. Gerhard Henrik Armauer Hansen, a Norwegian physician, first detected the rod-shaped bodies in leprosy nodules that became known as Mycobacterium leprae in 1873. The disease is only mildly contagious and not easily communicated to others, but when it does spread it seems to usually be by prolonged intimate contact. However, it

is often not transmitted to a spouse by an infected partner and is not directly inherited. Only a small percentage of children living intimately with the disease will develop it, and of those that do, often their own body defenses will overcome it. Young children are more susceptible to the disease than adults. The likelihood of infection is dependent upon the amount of infection one is exposed to. Many people seem to have a natural immunity to leprosy; the lack of such immunity is probably the most determinant factor in transmission.²

2. Forms of the Disease

The first signs of leprosy are detected as changes in the skin, mucous membranes, or the peripheral nerve system, caused by invasion of these tissues by the bacilli. Skin changes involve the appearance of a non-itching spot or variety of spots on any part of the skin. These spots show a change in sensation; there may be a loss of sweating and absence of hair growth in the center of the spot. Thickening of certain nerves follows. Later, in certain types of the disease, nasal stuffiness or hoarseness may occur. The eyes may also be affected at this early stage. The extent of signs of the disease is influenced by the amount of resistance. If body defenses cannot completely combat the bacilli invasion at this point, a tuberculoid type of leprosy may develop. A more serious lepromatous type will progress if there is little or no resistance by the body's immune system. A middle course of the disease is known as borderline type.³ Leprosy is not in itself usually fatal, but the individual will succumb to some other sickness due to his weakened condition.

a. Lepromatous Leprosy

Lepromatous and tuberculoid types differ in their progress. The former is characterized by early skin changes and later,

2. Oliver Hasselblad, Hansen's Disease: A Present Day Understanding, (n.p, n.d.), pp. 2-3.

3. Ibid., pp. 3-4.

less prominent nerve changes. First, nodules, or swelling sores, appear in various locations, which slowly increase in size and number. The upper respiratory system is also affected, as are the eyes, and changes can occur in certain viscera such as the liver and spleen. Nerve changes can appear later in the form of periodic fevers. Patients sometimes die during these periods, while in others a period of stagnation may be followed by recurrences of fever. Anesthesia or loss of sensation occurs. Untreated lepromatous leprosy lasts on the average eight to ten years.

b. Tuberculoid Leprosy

In tuberculoid leprosy, nerve changes dominate the disease manifestation, while skin changes appear only as spots. First, pain and fever episodes occur and during these attacks brownish patches appear on the skin, lasting from a few days to years, and can disappear and reoccur. Ultimately the peripheral nerve branches and main trunk are attacked, with accompanying pain, paralysis, and muscle wasting. Fingers become clawed, ulcers may develop, and fingers, toes, or whole feet can be lost. Many victims of this type live to be very old, with death the result of kidney disease or other problems of advanced age. This type of leprosy lasts on the average twenty years at least.⁴

4. Th. M. Vogelsang, "Gerhard Henrik Armauer Hansen, 1841-1912. The discoverer of the leprosy bacillus. His life and his work." International Journal of Leprosy And Other Mycobacterial Diseases 46, no. 3 (July-September 1978): 278.