English 280, Second Place; Professor, Carol Bollin

The White Plague

Jasbir Bhangal

Homo sapiens sapiens

. From the most calamitous of human activities-

pollution, wars, industrial accidents, nuclear meltdowns, and so much more—to the most devastating of natural disasters—earthquakes, volcanoes, storms, fires, and floods—humanity has inexorably endured, becoming stronger in the process; yet, among these scourges, one is fully understand what this awful disease is and its lethal consequences not only for people, but also for society as a whole, in order to treat it.

Mycobacterium

M. bovine

M. tuberculosis

Mycobacterium

tuberculosis

Mycobacterium t

М.

These tubercles form when bacterium enters the lungs. The body's immune system automatically reacts to defend against the trespasser. Specialized cells attack and surround the invaders and they are calcified, forming the round, nodule-like tubercles that sit within the lung. At any time, whether by stress or other diseases, the bacterium can reactivate. How terrifying to think that someone could have the disease and still spread it to someone else without realizing.

ailment as scrofula (Buikstra and Roberts 8). Stacie D. A. Burke, a professor of Anthropology, explains other forms the disease takes: when TB infects the blood, it is known as military tuberculosis; when the disease infects the brain and/or spinal cord, a more serious condition called tuberculosis meningitis develops (Burke 29). But these are only a few of the disease's many forms.

Tuberculosis is infamous for the amount of lives it has reaped. The bacterium's complicated cell wall, ability to hibernate in a host, and infect and re-infect multiple body parts makes it an especially resilient species—but these factors on their own cannot fully explain how it can devastate whole populations. The answer lies in transmission. Infectious diseases can be spread via direct or indirect contact. Tuberculosis is disseminated through droplet transmission: a person with the illness exhales (usually by coughing or sneezing), releasing droplets that contain the bacteria. These droplets then make contact with another person, who can also either develop the disease, or carry it around in its latent state. Occasionally indirect transmission can occur when the droplets land on a surface that a person touches and becomes infected, but this must happen in a short time period because the bacteria in the droplet(s) have to be viable.

This droplet form of transmission is an especially important factor when looking at how the disease can infect whole populations. Stacie D. A. Burke quotes Jeffery R. Starke when she says tuberculosis is "the quintessential family disease" (Burke 29), perfectly paralleling Sher74.850 0Tf [phe] term "family disease;" though, when looking at transmission of the diseases forms, this makes a lot of sense.

As explained earlier, Mycobacteria bovis infects cattle (and humans). Because a large portion of American and European diets consisted of meat, milk, and cheeses, that bacterium could easily transfer to human populations, and then spread from person to person—just as easily, someone could breathe in the droplets of an infected victim and come home to unwittingly spread it to their entire family or anyone else to whom they were close. With the disease able to disseminate across not only the human body so quickly but also among large populations and remain resistant to treatment, it's no wonder that so many fell victim to it—exactly what is happening now in Haiti and parts of India. Most people affected tend to live in poorer regions, where the populations are denser, meaning that transmission is not only likely, but almost guaranteed.

As it is in human nature, people strove (and continue to this day) to find cures—and if cures couldn't be found, remedies were created to help alleviate symptoms. Throughout ancient times and the Middle Ages, medical advice, while logical, was based on false premises that stemmed from a lack of true knowledge of the human form. Blood-letting illustrates this best: it was commonly accepted in the Middle Ages that the body consisted of four so-called humors—body fluids that corresponded to four personality types. Illness was the result of these four fluids becoming imbalanced. Occasionally, outside intervention was necessary to rebalance the humors. Helen Bynum points out in Spitting Blood: since tuberculosis patients often spat out blood, keeping the four-humors system in mind, it was reasonable to assume the body was trying 1cm BT 7.8687 156ro.

California, urging consumptives (mainly those wealthy and white) to come to Los Angeles for relief (5). It isn't difficult to imagine the lure that California must have had to those with TB. Even Laura—who never had TB—was convinced that California would help her live longer: "If I can get to California where the air is always soft and fragrant and the hills are green and smooth as corduroy," she reasons, "it might just be I'll live forever, after all" (Windle 449). Imagine, then, the pull a TB victim must have felt: having the terrible disease was to eternally stand in the shadow of death—but then picture the hope the patient must have experienced after being told that perhaps there was relief to be found in the Promised Land that lay beyond the Mississippi River

The Forgotten Plague reveals that Robert Koch's discovery of the tuberculosis bacillus itself caused little change. Few people could believe that microscopic organisms could cause such a dangerous illness; Koch's findings weren't widely acknowledged until the late eighteen hundreds when scientists in Europe and America all brought forth evidence supporting his theory. Before public acceptance of TB's bacterial cause, most scientists

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Works Cited

Burke, Stacie D. A. "Tuberculosis: Past and Present." Reviews in Anthropology 40.4 (2011): 2752. Academic Search Premier. Web. 26 Oct. 2015.

Bynum, Helen. Spitting Blood: The History of Tuberculosis. Oxford: Oxford UP, 2012. Print.

Gazit, Chana, dir. "The Forgotten Plague." American Experience. PBS. Boston, Massachusetts,

20 Oct. 2015. Web. 29 Oct. 2015. Transcript.

Roberts, Charlotte A., and Jane E. Buikstra. The Bioarchaeology of Tuberculosis: A Global View on a Reemerging Disease. Gainesville, FL: U of Florida, 2003. Print.

Woods-Windle, Janice. Hill Country: A Novel. Atlanta, GA: Longstreet, 1998. Print.