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Doctor For Me? No Sir-e!:

Common Diseases That Miners Faced

During the Early 1900s

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Today, going to the doctor is about as eventful as going to the bank. We get check-ups once a year and make a visit every time we get a sniffle, but during the late part of the nineteenth century and early part of the twentieth century people were more reluctant to step foot in the doctor's office in fear of what the diagnosis might be. During the time where you could find an ad for cigarettes in medical journals or buy Adrenalin shots out of a catalog, people did not put their health as their number one priority whether it be while they were at work or play. Men who worked in the mines and lived in the Tri-State area faced many safety and health hazards each and every day. Whether the hazard consisted of breathing in the potentially deadly dust created in the mines that the men worked in, or the sexually transmitted diseases that they would frequently pick up in the bars while not having to work during the weekend, the diseases could ultimately cost the workers their lives.

During the later part of the nineteenth century, mines started popping up all over the tristate district, which consisted of Jasper and Newton counties in Southwestern Missouri, Cherokee County in the Southeastern corner of Kansas, and Ottawa County in Northeastern Oklahoma.<sup>1</sup> Men started traveling to the area from all over the country in hopes of finding their fortune, and began first harvesting the minerals in Missouri during 1848.<sup>2</sup> Later that century, the mining expanded into Cherokee County, Kansas, and then made it to Oklahoma in 1891, where the miners found the richest and most productive veins of the minerals.<sup>3</sup> From 1880 to 1950, the tri-state district was the world's leading producer of lead and zinc, and every new mine that was

<sup>&</sup>lt;sup>1</sup> A.M. Gibson, "Early Mining Camps in Northeastern Oklahoma," *Chronicles of Oklahoma* 34 (1956).

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ibid.

opened was declared as the "richest in the world." Although the mine owners were making great amounts of money, the miners themselves were only getting paid for what they could bring to the surface, leading to many exhausted workers, and men who were in great need of a good time.

After working a long and very exhausting week, many miners wanted to go out and celebrate not having to be at their job the next day so they would frequent the local bar scene. According to Joel Livingston of Joplin, Missouri, the town of Joplin had seventy-five saloons open day and night to serve the miners. They were said to have had free concerts every night with a matinee performance on Wednesday and Sunday afternoons. One of the most popular saloons at the time was the Blackwella Bar where it is said that something entertaining was always bound to happen. One night, a crowd of one thousand and two hundred people gathered around to watch a bear brought up from Arkansas fight six bull dogs. Amongst the exciting atmosphere of the bar scene, many men and women of that day lit up a cigarette. Not only did they get a quick hit of nicotine, it was the "thing to do" at the time. The consequences of cigarette smoke were not apparent at the time, and many people gave in to the pressure to light up. The Journal of the Missouri State Medical Association even had an ad for Chesterfield Cigarettes in the front of their annual journal stating that of all the ways that someone could use tobacco, smoking cigarettes was the safest form.

Because many of the men decided to celebrate more than they should have during the weekend, many men wound up with sexually transmitted diseases. Gonorrhea was especially a

<sup>&</sup>lt;sup>4</sup> Gibson, "Early Mining Camps," Chronicles of Oklahoma 34 (1956).

<sup>&</sup>lt;sup>5</sup> Gibson, "A Social History of the Tri-State District," *Chronicles of Oklahoma* 37 (1959).

<sup>&</sup>lt;sup>6</sup> Chesterfield Cigarette Ad, Liggett and Myers Tobacco Co., *Journal of the Missouri State Medical Association* (1933): 4.

wide spread problem in the tri-state district. Doctor Nels A. Nelson explained in a pamphlet released in 1936 that 1,037,000 new cases were treated in the United States just that year for the disease. Another million were treated for old infections and many tried treating the disease at home by themselves. Even more than those numbers are the amount of women who contracted the disease that never knew that they had it. Doctor Nelson also put to light that there were no known cures or medicines for gonorrhea at the time. Doctor Nelson went further as saying that "washes and injections for the urethra and massage of the prostate in men, douches and hot hip baths for women are the treatment. If there are complications, a variety of other treatments may be needed. The doctor who knows how to use the right things at the right time is the one who gets good results, -provided the patient behaves."

In 1931, the budget for the Cooperative Medical Clinic in Picher, Oklahoma was twelve thousand dollars. The clinic was opened in July of 1927 and during that time the clinic was financially supported by the United States Bureau of Mines, The Metropolitan Life Insurance Company, and the Tri-State Zinc and Lead Ore Producers Associations. In March of 1929, it was discovered that many of the men that were working in the mining district had contracted venereal disease. Doctor Meriwether, the clinic's Director, suggested that the Cooperative Clinic should open a Venereal Disease Treatment Section to the clinic. Through an investigation, the doctors found that very few of the men who had venereal disease were getting treated by other doctors, and those who had sought treatment saw no signs of improvement. The doctors figured that the poor success rate for eliminating the disease was due to the high costs of the treatments and the fact that many of the men were careless in continuing with the treatment. The budget for

<sup>&</sup>lt;sup>7</sup> Nels A. Nelson, M.D., 1936, "Gonorrhea," Box 62, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>8</sup> Ibid.

the Venereal Disease Section for 1929 to 1930 was \$4,600. After being open a year, the costs of the Venereal Disease Clinic were \$6,800.36, including the cost of equipment. The doctor was recorded as saying

The value of the V.D. Clinic has been unquestionable, as is clearly indicated by the accompanying statement showing the number of cases treated and the number of treatments given. It will be noted that the number of cases under treatment at the present time is larger than at any previous period and totals 402, of which 257 are male and 145 are female. Up to the end of April, 1931, a total of 1,653 cases had been treated, of which 571 had been discharges as arrested or cured. The total number of treatments for all purposes up to that time amounted to 30,068. A detailed examination of the accompanying statements will show you that this work must be continued.<sup>9</sup>

A miner being healthy not only benefitted the miner, but also helped the mining company out as well. A healthy miner was a harder working miner, and spending money to keep the workers in good health equaled the mining company making more money.

After letting out steam during the weekend, the miners had to return to work the following Monday. After some of them faced dangerous situations to their health during their time off, most of the miners had to face dangerous health and safety conditions at their work throughout the week. At the mines, drills and other machinery put out heavy silica rich dust into the air. When miners inhaled the dust, the dust would settle into their lungs and get trapped. Once the silica particles were trapped in the miner's lungs, the lungs would become inflamed and become scarred by the lesions that had formed in the man's lungs.

Silicosis was a potentially deadly and debilitating disease that affected so many of the men that worked in or around the mines. If a man was working in the mines for a decent amount of time, it was not a question of *if* he would get silicosis, rather than *when*. Silicosis was only

<sup>&</sup>lt;sup>9</sup> Confidential Memorandum To Honorable Joseph J. Manlove In Regard To The Picher Clinic, Box 87, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

seen as an occupational disease, and affected many men who chose mining as their profession. After contracting silicosis it was not a surprise if the men were diagnosed with Tuberculosis, as well. The two seemed to run hand in hand together, and the longer the mine worker had silicosis, the greater chances he had for coming down with Tuberculosis. Soon after contracting Tuberculosis, the man had little chances of survival. Just having silicosis was costly and it led to more wages from work being lost due to men sometimes having to miss work because of their illness, as it made them very weak from not getting enough oxygen at times. From the time that the mine worker was first affected by the disease, it lasted about five to ten years until the worker succumbed to the illness.

Silicosis, also known as Miners' Consumption, was first recognized in 1862 by the Royal Commission of England. They found that metal miners seemed to all come down with some sort of illness that had the symptoms of a cough and severe fatigue. Many years after that, in 1902, miners in South Africa were noted as having the same symptoms. Five years later, Australian officials started to investigate a high number of deaths of men who once worked in the metal mines in their country. Not until 1914 did the United States start looking into the deaths of the miners here in our own country. The first location that doctors and specialists were sent to look into these occurrences was in the Joplin mining district where the miners were mining for zinc. <sup>13</sup> The mining industry was a booming business at the time and although men were getting sick left

<sup>&</sup>lt;sup>10</sup> A.J. Lanza, M.D., Silicosis From The Public Health and Economic Viewpoint, 174.

<sup>&</sup>lt;sup>11</sup> A.J. Lanza and Robert J. Vane, *The Prevalence of Silicosis in the General Population and its Effects Upon the Incidence of Tuberculosis*, Box 61, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>12</sup> Lanza, Silicosis From The Public Health and Economic Viewpoint, 174.

<sup>&</sup>lt;sup>13</sup> Lanza, "Miners' Consumption," Medical Sentinel 25 (3,673-74).

and right, the mining companies did not necessarily want to dig into the reasons why, as any road bump in the way of getting more material out of the ground could cost the company bundles of money. The dreadful characteristic of silicosis was the correlation of the silicosis and the tuberculosis, which signaled the end for the silicotic. "When a tuberculous infection is implanted on a silicotic lung, it intensifies and accelerates the formation of fibrotic tissue, and the pathologic vicious circle thus set up may continue for some time before the infection becomes clinically manifest."

Some doctors, studied silicosis very in depth. Doctor A.J. Lanza, in particular, is known for his lengthy study of the illness. He reported in the Medical Sentinel Journal that all kinds of rock contained silica dust and could be responsible for creating the horrible illness in the miners. He furthered that the kinds of rock known for leading to silicosis were quartz, flint, granite, gold, copper, and zinc. After continuously inhaling the silica dust, Doctor Lanza said, the rock dust produces a pulmonary fibrosis followed by perivascular and peribronchial thickening. Then, a nodular formation develops until massive fibrosis occurs in which there may be areas of anemic necrosis and cavitation. Later in the disease, the formation of massive fibrosis may be assisted by a super imposed tuberculous infection. Doctor Lanza included that the silicotic person does not have long to live after the tuberculosis becomes open. A sad fact of the debilitating disease was that once the person became infected with silicosis, even if the person no longer had exposure to the silica dust, the silicosis would progress. If the damage done by the silicosis was very slight, the man might have a better chance at living a disability free life, but the overall

<sup>&</sup>lt;sup>14</sup> Lanza, Etiology of Silicosis 3, Box 61, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>15</sup> Lanz, "Miners' Consumption," Medical Sentinel 25 (3,673-74).

<sup>&</sup>lt;sup>16</sup> Lanza, Silicosis From The Public Health and Economic Viewpoint, Box 61 (177), Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

mortality rate of people infected with respiratory diseases was high. <sup>17</sup> It was also observed in a study done in Picher, Oklahoma that "evidence of tubercle infection in over 50 per cent of the children under 16 living in contact with silicotic patients have a positive sputum, but the infection was entirely of the primary type and there was no progressive adult tuberculosis." <sup>18</sup> Although Doctor Lanza made many very important discoveries about the disease, some things that were thought to be true were a little off base. One example would be the thought that black people were not as resilient against the silica dust and that they would become tuberculous faster than a white person and die more quickly as well. <sup>19</sup> This assumption is probably due to the fact that not many black people had made it as far west as the mining camps were established yet, and so there were not as many cases of silicosis in the black population that could be studied to get an accurate conclusion.

After a while, silicosis started making front page headlines in news papers all over the country. During the 1930's, it had become the most significant occupational disease to arise.<sup>20</sup> It even caught the attention of President Hoover, who was recorded as saying that it was not uncommon to find women in the mining towns who had been married seven times, during a time that there were no divorces.<sup>21</sup> Workers not only had to face harsh conditions such as poor ventilation, exposure to toxins, and long hours while at work, many had to return home to a

<sup>&</sup>lt;sup>17</sup> Lanza, Silicosis From The Public Health and Economic Viewpoint, Box 61 (177) Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas..

<sup>&</sup>lt;sup>18</sup> *Ibid*.

<sup>19</sup> Ibid.

<sup>20</sup> Gerald Markowitz and David Rosner, "The Street of Walking Death: Silicosis, Health, and Labor in the Tri-State Region, 1900-1950," *The Journal of American History* 77 (September 1990): 526.

<sup>&</sup>lt;sup>21</sup> Louis C. Boisliniere M.D., "Silicosis and Silicotuberculosis," *The Journal of the Missouri State Medical Association* 30 (August 1933): 17.

shanty-like structure that they had their family living in.<sup>22</sup> When a new dig sight was discovered, many men rushed to the area and sometimes brought their families with them. Instead of spending time building a nice, new, cozy home, they would rush to the fields to start trying to make a living. After they had made their first pay check, they were still unable to build a suitable house due to the low wages. This made the miners' health conditions even worse. Not only did the miners' have poor living conditions, they also had raggedy clothes and unsatisfactory food. At times, the Union would step in and organize drives to raise money to help out the men and their families, but vary rarely was it enough to do much good.<sup>23</sup> A lot of times the owners of the mine and the insurance companies that worked for the mine owners would put the miners' strife off as saying that it was not the mine that was causing health problems, it was the way the men were living. They blamed the men's poor health on their living conditions and diet.<sup>24</sup> Up until about the time of the Great Depression, medical professionals and government workers documented the miners' working conditions and how it affected their health, and the community's health, as well. During the time of Franklin D. Roosevelt's New Deal, a heated battle took place over worker's health. Sadly, it didn't last long as there were other areas that the government was more interested in.<sup>25</sup>

Even though many mine owners helped to set up special medical clinics for the miners after attention was brought to the poor working and health conditions the men faced, many workers were still reluctant to go. This was partly because most of the men knew the outcome of

<sup>&</sup>lt;sup>22</sup> Markowitz and Rosner, "The Street of Walking Death: Silicosis, Health, and Labor in the Tri-State Region, 1900-1950," *The Journal of American History* 77 (September 1990) 526.

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Markowitz and Rosner, "The Street of Walking Death: Silicosis, Health, and Labor in the Tri-State Region, 1900-1950," *The Journal of American History* 77 (September 1990), n.p.

knew that if they went and were found to have the disease, that they would probably lose their job. Some mining companies would pay for annual checkups for each of their employees, and to someone from the outside world looking in, it seemed as though the company was truly worried about their employee's health, but to those who knew the real meaning behind the visit, the mine owners did not look so nice. Some of the mining companies would use the annual checkup as a screening process to see which of their workers were healthy enough to make them money, and who among the workers would just be dead weight. After their visit with the doctor, the men who were diagnosed with later stages of silicosis were fired by some of the companies. leaving the men with no way to provide food for their families or a way to pay for clothing and housing.

Although many had given up hope on finding a cure for the awful disease, or even a remedy to ease the suffering of the inflicted, an idea rose from the dungy floors of a weapons plant. Before, prevention was the only known way to combat silicosis. The use of ventilation and water misters to keep the dust down seemed to help the problem, but others wanted to find a cure for something that was bound to creep up in any mining town. The answer to them was the use of aluminum powder treatments. Hospitals along the east coast and into Canada started to test the use of this off the wall treatment. Aluminum powder had not been seen much after the use of aluminum bronze powder produced by the old stamping process had been become an out-of-date process at that time. Doctors found that many of the men who volunteered to test out

<sup>&</sup>lt;sup>26</sup> Dr. Leroy U. Gardner, "Silicosis: And What We Know About It," *Mining World* (September 1939): 27.

<sup>&</sup>lt;sup>27</sup> McIntyre Research Foundation, *Conference on Silicosis and Aluminum Therapy*, (1949) Special Collections, Box 62.

the treatment gained weight and it left no signs of being toxic.<sup>28</sup> It was discovered by the McIntyre Research Foundation that the men who had rapidly developing silicosis responded better and more quickly to the aluminum powder treatments compared to the men who had slower moving silicosis.<sup>29</sup> Robert G. Scott, Personnel Director of The Commercial Steel Casting Company in Marion, Ohio stated that forty percent of their one hundred and eight employees claimed improvement after using the treatment. "We have never had one complaint of any ill effects whatever remaining after they stopped taking treatments."<sup>30</sup> Another company who had employees that were silicotic did some research with the help of the infected men. In 1942, the company used thirty-five of their workers for the study on the aluminum treatment, as a prophylactic measure against silicosis. All of the men had basically the same amount of exposure to the silica dust "in regard to particle size and concentration of dust." Eighteen men were given the aluminum powder treatment and seventeen men were used as the control group. The aluminum powder treatment was given to the workers periodically thirty times per year. For thirty weeks, a treatment of a ten minute inhalation of aluminum powder was administered, followed by a rest period of no treatments for twenty-two weeks. Occasionally, some men were allowed to deviate from the routine for individual reasons not in conjunction with the treatments itself. Most of the patients in the treated group did not experience any adverse side effects from the inhalations, besides a slight cough. For the men who suffered from the cough, a simple drink of water relieved the symptom. The eighteen men who were under this treatment had routine

<sup>&</sup>lt;sup>28</sup> Francis C. Frary, Ph.D., *Industrial Exposure to Aluminum Dust*, Box 61, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>29</sup> McIntyre, *Conference on Silicosis* (1949): 45, Box 62, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>30</sup> McIntyre, *Conference on Silicosis* (1949): 18, Box 62, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

examinations accompanied with chest X-rays throughout the seven year period. During the seven years that the men were being treated, they continued to work at their jobs in which they were exposed to high concentrations of silica dust. After the period of time the men participated in the aluminum powder treatments, they showed no sign or symptoms of silicosis or any disability to come. The X-rays also came back clean, free of any dark spots that would lead the doctors to believe that silicosis was developing. Out of the seven men who used in the control group, two had become totally disabled due to silicosis, a few had mild symptoms of the disease but stayed on the job, and the remainder had no complications or symptoms of silicosis.<sup>31</sup>

Although researchers found that the treatment could help the inflicted workers out, some had their doubts on if others would want to spend the time verifying the treatment's success. According to doctor E.W. Brown, who had input in the pamphlet put out by the Conference on Silicosis and Aluminum Therapy, it was doubted that any other scientific organization would want to spend time looking at this treatment option since the study would have to be over a time span of over five years to know whether or not the aluminum therapy worked. "For these reasons it appears improbable that any permanent research agency would consider it advisable to undertake such a project. It would require a prolonged and indefinite number of years for completion, the results might not be conclusive, and the cost of a high order."<sup>32</sup>

Being a miner during the early part of the twentieth century could mean a rough life. Whether it be an illness that one might face during a night on the town, or a deathly disease caused by poor working conditions, many miners faced shorter life spans. Silicosis was a wide spread occupational disease that took many lives. Over time, many doctors, government

<sup>&</sup>lt;sup>31</sup> McIntyre, *Conference on Silicosis* (1949): 45-46, Box 62, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

<sup>&</sup>lt;sup>32</sup> McIntyre, *Conference on Silicosis* (1949): Box 62, Picher Collection, Pittsburg State University Special Collections, Pittsburg, Kansas.

officials, and researchers developed their own ideas of the disease and how it could be prevented or even possibly treated. Although a remedy for the effects of the disease was found decades after the illness was at its peak, many of the men who were bothered by the disease did not get to benefit from it due to researchers wanting a "right-now" type of answer. By not putting time into finding a remedy, many men had to spend the last years of their lives debilitated and miserable in bed. If only doctors had figured out a cure for the terrible disease when it first came to light, thousands of men might have been able to live out their last days more comfortably than they did dying by the horrible disease known as silicosis.

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