

2010

The rise of the surgical age in the treatment of pulmonary tuberculosis: a case study of the Mississippi State Sanatorium

Ashley Baggett

Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses



Part of the [History Commons](#)

Recommended Citation

Baggett, Ashley, "The rise of the surgical age in the treatment of pulmonary tuberculosis: a case study of the Mississippi State Sanatorium" (2010). *LSU Master's Theses*. 302.

https://digitalcommons.lsu.edu/gradschool_theses/302

This Thesis is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Master's Theses by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.

THE RISE OF THE SURGICAL AGE IN THE TREATMENT OF PULMONARY
TUBERCULOSIS: A CASE STUDY OF THE MISSISSIPPI STATE SANATORIUM

A Thesis
Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts
in
The Department of History

By
Ashley Baggett
B.S., Louisiana State University, 2003
May 2010

ACKNOWLEDGMENTS

In writing this thesis, I have had the help of many people. My advisor, Carolyn Lewis, deserves a significant amount of thanks. Through her mentorship, she introduced and guided me to an invaluable and integral part of history, which now directs my perception and studies. Her contribution is a debt I could never repay. The other committee members, Charles Shindo and Alecia Long, also deserve thanks for reading and critiquing this document.

Additionally, the archivists at the Mississippi State Archives have earned special mention. I spent many long days there. Even when I would rush to request materials minutes before closing, they just smiled and continued to be immensely helpful. They created a positive atmosphere that made researching for hours a pleasure.

Lastly, I would like to acknowledge a great personal debt to my husband, Kevin. His remarkable skills as a librarian helped me obtain many difficult to find books, articles, and legislative journals. If that was all, it would be enough, but his contribution as a faithful supporter of my professional goals could never be fully described. And for that, I am the most thankful.

TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	ii
ABSTRACT.....	iv
CHAPTER 1 INTRODUCTION.....	1
PART I: ORIGINS	
CHAPTER 2 POWER AND TREATMENT: THE RISE OF MEDICAL AUTHORITY.....	12
CHAPTER 3 DEVIATIONS IN TREATMENT: THE HISTORY OF TUBERCULOSIS IN AMERICA.....	24
CHAPTER 4 THE CREATION OF THE MISSISSIPPI STATE SANATORIUM AND THE DOMINANCE OF THE REST CURE.....	34
PART II: THE SURGICAL AGE	
CHAPTER 5 THE TURNING POINT: DECLINING SUPPORT FOR SANATORIA AND FISCAL HARDSHIPS.....	43
CHAPTER 6 THE TURN TO THORACIC SURGERY: SURGICAL AND POLITICAL SUPPORT.....	56
CHAPTER 7 PUBLIC SUPPORT FOR THE MISSISSIPPI STATE SANATORIUM AND THE SURGICAL AGE.....	74
CHAPTER 8 CONCLUSION: THE RECENT CHAPTER IN TREATMENT FOR PULMONARY TUBERCULOSIS AND REVISION OF THE SURGICAL AGE.....	89
BIBLIOGRAPHY.....	96
VITA.....	103

ABSTRACT

The historiography of tuberculosis, “TB,” covers four periods in the United States. During the Victorian Age, TB was classified as consumption. After Robert Koch’s discovery of the tubercle bacillus in the 1882, the germ theory took precedence. The early 1900s saw the rise of the Sanatorium Age, and finally, the antibiotic revolution of the 1940s and 1950s began the current understanding of the disease. Missing from this periodization is an era in which surgery took precedence as the preferred treatment for tuberculosis. This study corrects the historiography by arguing for a recognizable Surgical Age in the 1930s and 1940s.

With the benefits of hindsight, historians have dismissed the Surgical Age. Many fail to make any mention of it at all. Those scholars who do tend to lump surgery in with the Sanatorium Age, assuming surgical treatment was simply an extension of the rest cure. The few who do recognize the Surgical Age as a distinct era mistakenly dismiss it as a negligible “blip” before the discovery of antibiotics. All of these scholars miss the crucial importance of the Surgical Age and the interplay of politics, medicine, and the public in shaping it.

This study examines the Mississippi State Sanatorium as a case study of the Surgical Age. In hindsight, we can see that surgery did not produce the most favorable results in treating tuberculosis, but the fact is, surgeons and physicians at the time thought that it did. Politicians promoted it to their constituents. And the public, in turn, demanded it. For two decades, surgical therapy dominated the pioneering techniques for pulmonary tuberculosis treatment. To correct the historical narrative, the Surgical Age needs to be recognized as a separate era that rose out of the sanatorium’s search for legitimacy during the Great Depression. As this thesis shows, this legitimacy was contingent upon the ongoing support of the public, politicians, physicians, and patients.

CHAPTER 1

INTRODUCTION

In December of 2008, the Champagne-Urbana Public Health Unit diagnosed Clasance Botembe with pulmonary tuberculosis (TB). The Illinois Department of Public Health provided him with the necessary antibiotics and nursing services on the condition that he follow his doctor's orders to stay in isolation. By Wednesday, January 21, 2009, he again stood in the Champagne-Urbana Public Health building. Rather than receiving medical treatment, however, Botembe faced a makeshift courtroom filled with lawyers, a judge, and several reporters, all wearing protective face masks.¹ Prosecutors claimed Botembe knowingly spread the disease to his girlfriend and defied his physician's instructions to wear a respirator mask when he entertained guests in his apartment.² The public health officials believed Botembe's carelessness with his girlfriend and in his home warranted a crime against the community, and Judge John Kennedy agreed. He ordered Botembe to wear a tracking device and to remain in quarantine for thirty days, with the threat of a Class A misdemeanor and jail time if Botembe did not comply.³

Clasance Botembe's case portrays not only fears about tuberculosis, but also the intersection of medicine, politics, and public interests. Suffering from a debilitating and potentially deadly disease of the lungs, Botembe rightfully sought the help of medical professionals who, by law and professional standards, are required to keep medical treatment

¹ Amanda Evans/WCIA Channel 3 News, "Man with Tuberculosis Ordered to Isolation," Nexstar Broadcasting, Inc., <http://illinoishomepage.net/content/fulltext/?cid=65011> (accessed December 20, 2009).

² WCIA Channel 3 News did not mention whether the visitor in Botembe's apartment was in fact his girlfriend. USA Today only reports that Botembe's girlfriend acquired TB after exposure, and the event described by WCIA news remains absent in USA Today. One can speculate whether the public health nurses saw Botembe's girlfriend, who later developed the disease, but without a clear connection, the incident with the visitor and the spread of TB to the girlfriend remain two separate episodes in the case against Botembe.

³ Associated Press, "Judge Orders TB Patient into Isolation," USA Today, http://www.usatoday.com/news/health/2009-01-22-tuberculosis_N.htm (accessed August 18, 2009).

confidential. But when Botembe's actions threatened to spread TB, his physicians, placing general interest over that of patient privacy, broke patient confidentiality and enlisted the support of the local government. The unprecedented and unorthodox trial in Champaign County aimed at checking the growing number of those infected with TB. According to public health officials in Illinois, "keeping the community safe" necessitated public awareness, achieved through media coverage of the three-hour hearing and even disclosure of Botembe's medical file.⁴ By educating its citizens about this fearful disease, Illinois, like many states throughout the twentieth century, believed it could more effectively stop the spread of tuberculosis, which was experiencing a resurgence in most urban areas of the United States. The Botembe case reflects growing attention to the disease and public health responses.

In a similar although less extreme case on October 20, 2008, WBRZ Channel 2 in Baton Rouge, Louisiana, covered a story about a local incident of tuberculosis. In the story, the Louisiana Department of Health and Hospitals investigated a massage therapy school in which a former student had been diagnosed with active TB and four other students tested positive for exposure to the disease. The reporter, Luke Margolis, and the anchor, Michael Marsh, repeatedly stated to viewers "but you're probably not at risk" and "exposure doesn't mean you're going to get sick."⁵ The story further included information on the types of tuberculosis, methods of transmission, and symptoms. The repetition and explanations underscored a desire to contain local fears about a disease that many poorly understand and consider virtually eradicated from the United States. Public education dominated the message in WBRZ Channel 2's piece.

The recent increase in TB necessitates public awareness and reactions from public health officials. But public health officials struggle to balance education with containment of the

⁴ Amanda Evans/WCIA Channel 3 News.

⁵ Luke Margolis/WBRZ Channel 2 News, "Tuberculosis Case Turns up in BR," *The Advocate*, http://media.swagit.com/s/wbrz/The_Advocate/10202008-8.html (accessed January 20, 2010).

disease, which often inspires fear from the rest of society. Experts, moreover, are turning their attention to better understanding the history of the disease in hope for a more effective cure. Both medical professionals and public health officials disseminate information about the history of TB to meet their needs as well as the needs of the citizenry, but the information released lacks a crucial component. As recently as the March 2009 issue of *Scientific American*, an article titled “New Tactics Against Tuberculosis” traces the highlights of the disease’s history and outlines promising new treatments.⁶ Written by medical experts at the National Institutes of Health in the Institute of Allergy and Infectious Diseases (NIAID), the article presents the history of TB as a straight path towards the most effective treatment. The overview of what prior generations called the White Plague covers the disease as consumption, Robert Koch’s discovery of bacteria and the germ theory, the sanatoria and its rest cure, the invention of antibiotics, and finally “a way forward” with potentially better cures still under research.⁷

Understanding tuberculosis and its treatment increasingly warrants attention from historians as well as health practitioners. Legislators, doctors, and citizens in America have struggled with the disease for well over a century, and despite claims from WCIA Channel 3’s news coverage of Botembe, immigration and contact with “less developed” countries does not single-handedly explain the supposed recent resurgence of the disease once known as the White Plague.⁸ Clearly, tuberculosis remains poorly understood despite its continued presence. More

⁶ Clifton E. Barry III and Maija S. Cheung, “New Tactics Against Tuberculosis,” *Scientific American* (March 2009): 63-65.

⁷ *Ibid.*, 68.

⁸ While WCIA Channel 3’s coverage of the Botembe case did not clearly evince any ethnocentric or anti-immigrant beliefs, Amanda Evans (the reporter) did mention how Botembe was a native of Congo and that Champaign County has a sizeable TB population “because of the university” which has many foreign students and students traveling “overseas.” Without acknowledging the continued presence of TB in America or exactly how the disease is transmitted, WCIA Channel 3, perhaps unintentionally, appears to pass responsibility onto immigrants for a rise in local tuberculosis cases. In addition, the comments below the [USA Today](#) article included checking Botembe’s immigrant status to deport him, but some of

importantly, the cooperation between medical professionals and the government deprived Botembe of his rights as a patient and as an individual even before his actual conviction; in the wake of such cases, medical responses, especially with tuberculosis, defy the ideal of impartiality. This is hardly new. Many biases have entered into attempts to treat TB in the last two centuries, and, consequently, the history of tuberculosis has not shown a clear linear progression towards the most effective cure, despite claims made in the *Scientific American* article. This thesis seeks to remedy this history.

Although drug resistant strains of TB and the overall number of TB cases in the United States are increasing, tuberculosis never completely disappeared after the discovery of antibiotics in the mid-1940s. Recent statistics estimate a third of the world's population is currently infected with tuberculosis.⁹ Although roughly ninety percent of those infected will not contract an active form of the disease, two million deaths from tuberculosis occur every year.¹⁰ Ninety-eight percent of those deaths occur in developing nations, but with the rise of AIDS and a geographically shifting population, an increasing number of Americans suffer from compromised immunity.¹¹ As a result, TB has reemerged from the shadows. With this growing awareness of tuberculosis, medical professionals and historians focus on past therapeutic responses, and current literature, both historical and medical, incorporates past knowledge and treatments of TB. The historiography of TB covers four periods for tuberculosis in the United States. During the Victorian Age, TB was classified as consumption. After Robert Koch's

the comments also said to charge him with homicide or another felony and to protect the community's health at the cost of his individual rights since, according to one post, citizen rights are also a responsibility. Concluding race or citizen status definitively played into quarantine regulations is not possible without further proof. But, what is evident is that even if either bias entered into the situation, fear of tuberculosis— which has a long history in America— was integral to punishing Botembe.

⁹ Barry, 65.

¹⁰ Ibid., 62.

¹¹ Ibid., 62.

discovery of the tubercle bacillus in the 1882, the germ theory took precedence. The early 1900s saw the rise of the Sanatorium Age, and finally, the antibiotic revolution of the 1940s and 1950s began the current understanding of the disease.

The Sanatorium Age deserves particular attention from scholars. Although fewer than ten percent of people with tuberculosis ever entered a sanatorium, the sanatorium remains the most remembered method of treatment for tuberculosis, an emphasis in popular memory which distorts the historical record.¹² For example, scholars treat surgical attempts to cure TB as a minor component of a broader rest therapy in sanatoria. With medical professionals of today, they dismiss surgery as a brief fad spurred by self-interested surgeons. By the twenties, however, sanatoria were no longer considered effective. Instead, surgery appears to have been the cause of decreased mortalities from TB in this period.¹³ Thus, historians have overlooked the changing purpose of sanatoria and the critical transition in treatment of tuberculosis to surgical methods in the 1930s. The growth of thoracic (chest) surgery in treating tuberculosis, what many at the time praised as a “great step forward,” must be integrated into the historical record of TB in the United States.¹⁴ Whatever misgivings hindsight may offer to surgical intervention, the general public, government, and medical community of the time believed surgery was the answer. By neglecting what can be called the Surgical Age, medical and historical analyses of tuberculosis therapy provides an incomplete foundation for understanding the disease.¹⁵

¹² Katherine Ott, Fevered Lives: Tuberculosis in American Culture since 1870 (Cambridge, Massachusetts: Harvard University Press, 1996): 149.

¹³ Barbara Bates, Bargaining for Life: A Social History of Tuberculosis, 1876-1938 (Philadelphia, University of Pennsylvania Press, 1992): 266.

¹⁴ J.J. Singer, M.D. “Collapse Therapy in Pulmonary Tuberculosis,” *California and Western Medicine* 45, no. 2 (August 1936): 125.

¹⁵ Some historians, such as Katherine Ott, briefly mention a “surgical era,” but this thesis argues for the Surgical Age (153).

This study focuses specifically on pulmonary tuberculosis in the Surgical Age of the 1930s. Tuberculosis can affect almost every part of the body. Extrapulmonary tuberculosis (TB in organs outside of the lungs) exists in lymph nodes (scrofula), male and female genitalia (genitourinary TB), skin (cutaneous TB), gastrointestinal tract (gastrointestinal TB), brain (tuberculosis meningitis), spine, and almost every other area. The most feared form of TB is military tuberculosis. In this type, the bacteria spread in “innumerable tiny seedlike pods of infection” throughout the body, affecting many different organs simultaneously, and the individual dies more quickly and more often than pulmonary tuberculosis.¹⁶ Seventy-five percent of tuberculosis cases, however, are pulmonary tuberculosis (tuberculosis of the lungs).¹⁷ Since treatments did vary somewhat based on the type of tuberculosis, this study concentrates on the largest and most known form.

This study also centers on the Mississippi State Sanatorium (lovingly called “the San” by patients who survived).¹⁸ Sanatoria in the United States ranged from state funded to private institutions. Doctors at a private sanatorium had less political pressure in treating their patients, having generally only local boards of trustees to influence them. Consequently, state-funded sanatoria provide a clearer picture of the political connections and economic crisis that framed the Surgical Age of the 1930s. The doctors at the Mississippi State Sanatorium did not act independently of its state’s government, and the state government did not act independently of its citizens. As a state-sponsored institution, the Mississippi State Sanatorium offers an examination into the close link among state legislation, the medical profession, and the public.

¹⁶ Mark Caldwell, The Last Crusade: The War on Consumption, 1862-1954 (New York: Atheneum, 1988): 8-9.

¹⁷ Barry, 63.

¹⁸ Marvin R. Calder, Mississippi State Sanatorium: Tuberculosis Hospital, 1916-1976 (Florence, Mississippi: The Messenger Press, 1986): 235-246.

A case study of the Mississippi State Sanatorium also provides the ability to analyze closely the Surgical Age, including the growth in medical specialization, the economic pressure on the state government during the Great Depression, and the public's interest in pursuing a cure for TB. By the 1930s, thoracic surgery had passed its infancy stage and developed several procedures that promised to combat tuberculosis. The nationwide financial crisis placed extreme hardships on the sanatoria, especially those that were state funded, and forced these institutions to carefully select how funds would be allocated. In these choices, the sanatorium's struggle for a credible purpose becomes evident. The priorities of the Mississippi State Sanatorium aimed at increasing the surgical capacity of the facility and courting approval from the local community.

Although a national, comprehensive study remains necessary, this study demonstrates the importance of the Surgical Age in the history of TB. The Mississippi State Sanatorium performed collapse therapy (surgery to induce rest in the lungs) on seventy to eighty percent of its patients by the late 1930s.¹⁹ Although not every sanatorium, even state-funded ones, practiced collapse therapy at the rate the Mississippi State Sanatorium did, the institution was by no means atypical. Numbers of collapse therapy operations varied in part due to private versus state funded facilities. Choice in treatment also differed because of demographics of patients accepted in sanatoria. People with advanced tuberculosis and those with pleural adhesions (fibrous strands in the lung cavity) could not undergo much of the surgical therapy for TB. Consequently, sanatoria that took in more advanced cases, which usually were private sanatoria, had fewer who could benefit from collapse therapy.

Despite varying factors that influenced the use or nonuse of surgical intervention, the Mississippi State Sanatorium was not an anomaly. A study in the mid-1930s by G.L. Leslie, M.D., and R.S. Anderson, M.D., claimed the Michigan State Sanatorium (another state

¹⁹ Ibid., 20.

subsidized institution) performed collapse therapy on 72.3% of its patients.²⁰ Leslie and Anderson also noted that 278 civilian sanatoria reported using collapse therapy to the National Tuberculosis Association in only 10% of its cases.²¹ Not only do these figures show a correlation between state funded sanatoria and a rise in surgical treatment, but also they indicate a clear divergence in methods of treatment employed by state and private sanatoria. As states cut appropriations to many programs during the Great Depression, funding remained available for surgery in sanatoria. Clearly, state governments in the 1930s believed thoracic surgery provided the pathway to a genuine cure for tuberculosis. Surgery, then, was not simply a small component of the Sanatorium Age, but rather it was an era in TB's history all on its own. This thesis uses the Mississippi State Sanatorium as a case study to prove a distinctive Surgical Age.

Since the Mississippi State Sanatorium existed as a division of the Mississippi State Board of Health, records from the MS Board of Health— especially from Dr. Felix Underwood, who was executive director from 1924 to 1958— offer the crucial link between Mississippi politics and the Sanatorium.²² Legislative records, speeches, and correspondence to and from Governors Theodore G. Bilbo and Martin Sennett Conner also demonstrate a close political association with the Sanatorium. In fact, letters between Governor Bilbo, who promised during his inaugural speech in 1916 to create a sanatorium for tuberculosis patients, and Dr. Henry Boswell, who was the first Superintendent of the Sanatorium, serving for twenty-two years, showed a close political alliance and even suggested a friendship between the two men.²³

²⁰ John Alexander, The Collapse Therapy of Pulmonary Tuberculosis (Chicago: Charles C. Thomas, 1937): 9.

²¹ *Ibid.*, 9.

²² Lucie Robertson Bridgforth, "The Politics of Public Health Reform: Felix J. Underwood and the Mississippi State Board of Health, 1924-58," *The Public Historian*, Vol. 6, No. 3 (Summer, 1984): 5-26.

²³ Henry Boswell, M.D. to Senator Theodore G. Bilbo, July 9, 1940. Folder 11, Box 1102, Series M2: Simpson County, Mississippi, The Theodore G. Bilbo Papers. University of Southern Mississippi, Hattiesburg, Mississippi.

Financial records also offer some help in understanding the connection between the Great Depression and the rise in the Surgical Age. Annual audits disappeared for the years 1929-1937, but biannual reports of the Mississippi Board of Health and uniform monthly reports of the Sanatorium intermittently appeared, providing insight into budget cuts and selected expenditures. Personal correspondence of John H. Rowan, the business manager of the Mississippi State Sanatorium from 1924-1939, also allows intimate glimpses into the financial problems of the Sanatorium.

Articles from The Thermometer (the Sanatorium's newspaper), the Journal of the American Medical Association's (JAMA) *Archives in Surgery*, and numerous other medical journals from the National Institutes of Health and U.S. National Library of Medicine's online database PubMed, contain information about the medical field and thoracic surgery during the early half of the twentieth century. Medical books of the 1930s, such as John Alexander's The Collapse Therapy of Pulmonary Tuberculosis and Hugh Trout's An Appraisal of the Surgical Treatment of Pulmonary Tuberculosis, further corroborate beliefs and procedures advocated in the medical journals. The medical literature is key to the argument offered here. Constantly updated, it publishes emerging new developments in the profession, and since public health and private practice differ some, medical journals and books provide the best check for determining the medical profession's opinion on collapse therapy. Since the Mississippi State Sanatorium followed medical techniques and procedures suggested in national literature, the Sanatorium's surgical developments reasonably follow cutting edge practices of the entire profession.

Gauging public interest proves slightly more difficult than measuring medical attention to collapse therapy. Petitions to the Mississippi legislature coupled with articles and advertisements from newspapers, such as The Daily Clarion-Ledger and The Commercial

Appeal, and from the Mississippi Federation of Club Women's magazine, titled the Mississippi Woman's Magazine, show an investment in the Mississippi State Sanatorium and an increased faith in medicine in general from 1916 to 1940. In a sense, the Sanatorium further adapted its outreach programs to cater to the needs and desires of local citizens. Physicians, citizens, and the State worked together to push surgery as the preferred treatment for TB in Mississippi in the 1930s.

This thesis begins by uncovering the origins of the Surgical Age. The first three chapters cover the general rise of medical authority, the history of tuberculosis, and, more specifically, the history of the Mississippi State Sanatorium. Without the background information, the context and long standing connections among the government, the people, and physicians in the Surgical Age would be unclear. Historical and medical literature likely overlook the Surgical Age since it borrows from prior tuberculosis treatments and remains largely within the confines of the Sanatorium, but supposedly outdated methods of treatment lingered and overlapped for every era. Even today, tuberculosis treatment uses older methods, such as quarantine, prevention, and education. By analyzing the larger framework for the Surgical Age, the shift to surgery and its significance becomes more evident.

The second part of the thesis considers each contributor to the Surgical Age as it applies nationally and specifically to the Mississippi State Sanatorium, including the Great Depression and consequent political changes in Mississippi, the growth in thoracic surgery, and finally, public concern for a continued fight against tuberculosis. Although the second part of the thesis addresses each force as a separate chapter, they cannot be completely separated from the other. Nevertheless, charting the gradual yet distinctive shift from the rest cure at the Sanatorium to the collapse therapy cure requires analyzing each individually. Even so, the reader must keep in

mind the connection among the three because Americans have perceived tuberculosis as a social disease, focusing on the moral character of the host and society, rather than bacterial causation. Dealing with a social disease, then, requires the combined efforts of motivating public support, government action, and medical interest.

During the first half of the twentieth century, government funding and public support for sanatoria reflected the nation's approach to treating TB. In the midst of the Great Depression, however, sanatoria had to adapt in order to survive, and consequently, the purpose of sanatorium and the therapeutic treatment of TB changed. The history of Mississippi State Sanatorium provides corrected historical emphasis on the 1930s and surgical treatments for TB. It also permits questioning of the medical, political, and public connection. What factors influenced medical "advancement" and political legislation? Are citizens' voices heard? At what point do individual rights suffer for the supposed good of the community? Who benefits from new therapeutic responses, and are the best interests of the patient central to those changes? Furthermore, with the current resurgence of TB, especially amongst AIDS patients, the disease and the nation's response to it has again garnered widespread interest. Understanding the disease and its past treatment of tuberculosis, especially through sanatorium case studies, provides medical professionals and the government a better strategy in confronting, as colonist John Bunyan once infamously labeled tuberculosis, "the captain of all men of death."²⁴

²⁴ John Bunyan, The Life and Death of Mr. Badman: Presented to the World in a Familiar Dialogue between Mr. Wiseman and Mr. Attentive (London: Nathan Ponder, 1680): 129.

PART I

ORIGINS

CHAPTER 2

POWER AND TREATMENT: THE RISE OF MEDICAL AUTHORITY

Prior to the American Civil War, medical practitioners lacked professional authority. Although some doctors in small towns had substantial influence, the profession as a whole or as an institution did not possess power or, oftentimes, credibility. Structure for a profession could be acquired through colleges, training, and licensure, but the medical field lacked these cohesive checks.²⁵ Those who practiced medicine in the first half of the nineteenth century infrequently obtained a medical education. Doctors who did earn some level of instruction were taught at substandard institutions, learned vastly different material depending on the college attended, and rarely obtained prior clinical experience.²⁶ Since professors' salary depended on students' successful completion, many times students who were barely literate still graduated.²⁷ Furthermore, egalitarianism during the Jacksonian Age led state governments to repeal licensure requirement for doctors to practice medicine.²⁸ Without a licensure requirement, more people were able to claim the status of doctor, and the over supply of doctors saturated the market so that doctors could not gain the monetary prestige and ability to influence the profession.²⁹

²⁵ Paul Starr, The Social Transformation of American Medicine (New York: Basic Books, Inc., 1982): 20.

²⁶ Ronald L. Numbers and John Harley Warner, "The Maturation of American Medical Science," in Sickness and Health in America: Readings in the History of Medicine and Public Health, ed. Judith Walzer Leavitt and Ronald L. Numbers, (Madison, Wisconsin: University of Wisconsin Press, 1985): 114.

²⁷ *Ibid.*, 114.

²⁸ Starr, 57.

²⁹ *Ibid.*, 63.

Physicians during the early 1800s lacked more than claim to esoteric knowledge; they also did not have the power to persuade the patient.³⁰ Persuasion rests on the psychological dependence of the patient who trusts the doctor knows more and can help heal the distressed mind and diseased body. Social conceptions of health hindered surrendering private judgment to the physician. America at the time remained largely rural and agricultural. As a result, families perceived themselves as primary caregivers.³¹ Physicians lacked the skill and competence to demonstrate effective remedies in order to challenge the familial role in medicine. Instead, they relied on procedures and therapeutics similar to those used during the dominance of humoral pathology— an earlier belief that sickness resulted from the imbalance of the four humors, specifically blood, yellow bile, green bile, and phlegm. Bleeding, purging, enemas, mercury, and leeches were still employed by physicians, although with less frequency.³² Doctors believed the best medicine simply aided the body’s natural reactions to disease, and consequently, botanical and surgical remedies of the time produced results similar to physical symptoms of the disease, such as fever, boils, and diarrhea.³³

Surgical procedures were widely feared due to the high mortality rate even after Joseph Lister’s antiseptic discovery, and when surgeries were performed, the patient’s home remained the preferred location.³⁴ Until the 1890s, hospitals were established as charitable institutions. Paternalism and social obligation entrenched in middle and upper class Americans regarded hospitals as extensions of almshouses and dispensaries where the poor could receive medical

³⁰ Starr, 11.

³¹ Ibid., 32.

³² Charles E. Rosenberg, “The Therapeutic Revolution: Medicine, Meaning, and Social Change in 19th-Century America,” in Sickness and Health in America, ed. Judith Walzer Leavitt and Ronald L. Numbers (Madison, Wisconsin: University of Wisconsin Press, 1985): 48.

³³ Ibid., 42.

³⁴ Charles E. Rosenberg, The Care of Strangers: The Rise of America’s Hospital System (New York: Basic Books, Inc., 1987): 112.

care.³⁵ The voluntary hospitals of the mid-1800s were perceived as a place where the poor went to die because of the unsanitary conditions and overwhelming death rate.³⁶

For most of the 1800s, environmentalism dominated the public's understanding of how diseases were caused and spread. Physicians increasingly thought illness resulted from the body and the environment being out of balance.³⁷ Environmentalists focused on prevention and attacking predisposing factors since some of the issues could be eradicated through social reform.³⁸ As a result, the sanitation movement emerged to prevent the spread of disease through their cries over waning morality. Physicians further believed in the miasma theory, meaning organic material could produce disease. Robert Koch's discovery of anthrax's ability to generate after being placed in the soil under certain ecological conditions only seemed to substantiate the miasma theory.³⁹ Filth seemed to contribute to disease, and the sanitation movement thus gained credence.⁴⁰

Physicians then decided to promote sanitation measures.⁴¹ Sanitarians sought to improve facilities and educate the public about cleanliness. Florence Nightingale, for example, argued for "cleanliness, order, and ventilation," specifically in hospitals.⁴² Dirt and fetid air, in the miasma theory, spread disease. Hospitals, according to Nightingale, were designed not to cure the patient, but rather to provide a conducive atmosphere for healing, both physical and spiritual.⁴³

³⁵ Ibid., 15, 105.

³⁶ John Duffy, The Sanitarians: A History of American Public Health (Chicago: University of Illinois Press, 1990): 157.

³⁷ Rosenberg, "The Therapeutic Revolution," 40.

³⁸ Peter Baldwin, Contagion and the State of Europe, 1830-1930 (New York: Cambridge University Press, 2005): 5.

³⁹ Duffy, The Sanitarians, 68; Nancy Tomes, The Gospel of Germs: Men, Women, and the Microbe in American Life (Cambridge: Harvard University Press, 1998): 37.

⁴⁰ Baldwin, 8.

⁴¹ Duffy, The Sanitarians, 68.

⁴² Rosenberg, The Care of Strangers, 98.

⁴³ Ibid., 133-134.

When employed by Union hospitals during the Civil War, Nightingale's suggestions resulted in under a ten percent mortality rate.⁴⁴ Consequently, private hospitals emerged where patients could pay to avoid the stigma of charity. The profit and competition from private hospitals threatened the authority of physicians.⁴⁵

Physicians did not single handedly create the sanitation movement. Public health officials used sanitary science in an attempt to prevent the spread of illness by teaching the "three D's: dirt, disease, death."⁴⁶ Poverty and filth appeared to contribute to the increase in disease and spread of epidemics since the poorer areas contained dirtier living conditions and higher death rates. Sanitarians focused on promoting cleaner environments for the poor to avoid disease rather than morality of the poor as previous generations had.⁴⁷ The miasma theory, however, was still central to the sanitary movement and social understanding of disease.⁴⁸

Early public health officials also sometimes pushed for quarantine facilities. Historian Erwin Ackerknecht proposed a correlation between political responses to disease and types of government, with the more democratic ones leaning towards sanitation rather than quarantine measures.⁴⁹ While the United States emphasized sanitation techniques, quarantine orders still remained. Typically though, quarantines were used only in major epidemics or when the good of the community required subverting individual rights. The Botembe case shows how long quarantine has lingered in medical treatment, especially when the collective society's perceived wellbeing takes precedence over the individual patient. Although mortality rates were declining prior to the discoveries of Joseph Lister, Louis Pasteur, and Robert Koch, historians do not

⁴⁴ Ibid., 98.

⁴⁵ Starr, 170-179.

⁴⁶ Tomes, 255.

⁴⁷ Duffy, The Sanitarians, 128.

⁴⁸ Ibid., 129.

⁴⁹ Baldwin, 12.

recognize a single set of contributors that aided the reduction. Still, sanitary reforms starting in the 1850s clearly produced more than a negligible impact.

Overwhelmingly, historians acknowledge the germ theory's contribution to the birth of bacteriology and the modern laboratory. The germ theory, however, did not quickly gain widespread converts among medical practitioners or the public's perception of illness, nor did the germ theory conclusively alter the treatment of illnesses. Essentially, the germ theory connected the spread of diseases by identifiable microorganisms and relied on clinical findings rather than symptoms.⁵⁰ Critics argued bacteria were found in supposedly clean air and that bacteria could be the result rather than cause of illness.⁵¹ Wrong identification of bacteria, such as James H. Salisbury's findings, further led to opposition to the germ theory.⁵² Koch's discovery of the anthrax bacillus's ability to emerge from anthrax spores in the soil also contributed to social perceptions. Developments in technology and pathology piqued societal expectations, but during the first few decades after the appearance of the germ theory, the apparent lack of treatment for identified bacteria decreased support for the germ theory.⁵³ People continued to associate dirt with germs, and they returned to basic sanitary measures.⁵⁴

Slowly, the germ theory began to gain acceptance among physicians and was incorporated into public health measures. Through education programs, the public developed an awareness of bacteriology. Instead of strictly adhering to the germ theory, however, people integrated basic sanitation with bacterial causation. The "seed and soil metaphor" dominated, so

⁵⁰ Tomes, 35.

⁵¹ Ibid., 35.

⁵² James H. Salisbury was an American doctor who reported he found the germs for measles, typhoid, and malaria. Other physicians quickly disproved his claims, and Salisbury's mistakes weakened the germ theory's acceptance in the United States.

⁵³ Tomes, 35; Rosenberg, *The Care of Strangers*, 159.

⁵⁴ Ibid., 38; Barbara Gutmann Rosenkrantz, "The Search for Professional Order in 19th-Century American Medicine," in *Sickness and Health in America*, ed. Judith Walzer Leavitt and Ronald L. Numbers (Madison, Wisconsin: University of Wisconsin Press, 1985): 222.

that people believed a germ, if introduced to a susceptible host, would develop into an illness.⁵⁵ During the early part of the twentieth century, vaccines for specific illnesses, such as diphtheria and smallpox, emerged. Bacteriology had then firmly ensconced medical practitioners as authorities in science and health. Although the tubercle bacillus was identified by Robert Koch in 1882, attempts at finding a vaccine for tuberculosis remained elusive. Environmentalism, consequently, continued to linger, especially in relation to tuberculosis. Moreover, the discovery of tuberculin testing used allergic reactions to show whether a person had been exposed to TB. In spite of the ability to detect infection, tuberculin testing did not explain why some cases progressed to an active form of the disease and some remained dormant. TB did not follow the typical progression of contagious illnesses after the Bacterial Revolution. For tuberculosis, treatment remained stunted in environmentalism for a few more decades.⁵⁶

Class, however, provided no barrier to disease, and consequently, the public began demanding sanitation measures in public settings, such as codes for businesses, disposable items, and water filtration.⁵⁷ The appearance of quacks selling goods under false claims was bitterly fought by medical professionals, Progressives, and public health officials. By the early 1900s, governmental legislation, such as the Pure Food and Drug Act, reinforced public demands to protect the public against quackery and impure goods.

Towards the end of the nineteenth century, increased urbanization led to increased specialization of jobs. Health and occupations no longer revolved around family, and people encountered fewer familiar connections on which they could rely. The medical field benefited from the transition. In the 1830, the loss of licensure regulation had contributed to an increase in

⁵⁵ Tomes, 42.

⁵⁶ Baldwin, 21.

⁵⁷ Ibid., 172-173.

medical divisions, varying both medical outlooks and specialized fields.⁵⁸ States began passing licensure laws again in the 1870s due, in part, from pressure from the American Medical Association (AMA), which was founded in 1847. Nevertheless, the lack of uniformity amongst practitioners and colleges led to difficulties.

The AMA continued to urge standardization into the twentieth century. In 1910, the Rockefeller Foundation employed Abraham Flexner, a medical researcher, to draw up a report on the condition of medical education in the United States. Based on his findings, a large percentage of medical colleges were found to be substandard.⁵⁹ After the Flexner Report, specializations multiplied, medical colleges became more uniform and increased their requirements, clinical experience became mandatory, and hospitals became crucial for surgical specialists and internships. Public health officials endeavored to prevent the spread of contagious diseases, such as tuberculosis, and, in the wake of the germ theory, upper and middle class Americans joined public health reformers and medical professionals in this effort. Since their social standing did not protect them against illness, they pushed for more drastic solutions, such as a renewed interest on quarantining the sick. Middle class citizens pushed for further construction of hospitals, and consequently, hospitals continued to develop in light of the growing interests in public health. Clean air, sanitation, and standardization influenced the

⁵⁸ Robert P. Hudson, "Abraham Flexner in Perspective: American Medical Education, 1865-1910," in Sickness and Health in America, ed. Judith Walzer Leavitt and Ronald L. Numbers (Madison, Wisconsin: University of Wisconsin Press, 1985): 153.

⁵⁹ Historical interpretations on the impact of the Flexner Report differ vastly. Some, such as John Duffy, assert that the Flexner Report, along with pressure from the AMA, led to a reduction in the number of medical colleges and medical professionals, thereby making the profession more profitable. As physicians made more money, fewer people, especially poorer people, sought a career in public health. Private practice grew since the income promised to be higher than civil employees in the public health sector. Other historians, such as Paul Starr, claim medical schools had already been dwindling prior to the Flexner Report due to economic conditions. The decline in medical schools then led to an increase in quality education. The Flexner Report's impact, according to Starr, focused more on standardization, especially with specializations and legitimization of the profession rather than initiating radical change.

building site and architecture of hospitals, and medical authority and specialization promoted patient needs and satisfaction. Hospitals, then, sought to meet the demands of the public, and people no longer viewed the institutions as solely charitable organizations.

In the midst of these changes in medicine, growing patient deference to medical authority, the increasing importance of the hospital, and the dominance of physicians and specialists, sanatoria were erected to prevent the spread of tuberculosis. Under increased social pressure from a public fearing the White Death, state governments, public health officials, and private groups contributed to the establishment and organization of hospital facilities for tuberculosis. Under the guise of professionalism and public health, doctors and specialists maintained authority over tuberculosis patients in sanitariums. The Mississippi State Sanatorium is one example of such an institution.

The Medical Profession in Mississippi

In Mississippi, the medical profession followed the national movement to some degree. Mississippi's licensure and legislation paralleled other states; however, public health measures did not follow as closely. Mississippi, like many other Southern states, lagged behind the national average in health during and after the Civil War. At the turn of the twentieth century, Progressive Movement leaders sought to better Mississippians' physical wellbeing. The striking shift from what H.L. Mencken called "one dismal swamp" to becoming one of the leading states in public health measures, especially in regards to tuberculosis, warrants closer attention.⁶⁰

Like many territories in the Early Republic, Mississippi Territory had little legislation concerning the physical fitness of its residents, but even then, the state government entrusted medical practitioners and law enforcement to work for increasing public health. In 1799,

⁶⁰ Bridgforth, 8.

Governor Winthrop Sargent signed into effect *A Law Concerning Aliens and Contagious Diseases*, which required doctors to report to local officials anyone with an infectious illness, including tuberculosis. The governor could then “take such measures to prevent a communication of the infection...as he shall deem.”⁶¹ The Legislative Assembly of the Mississippi Territory further strengthened this law in 1803 and again in 1807. New additions required people who had suffered from such a disease, such as smallpox, to obtain a clean bill of health from a physician to go into public places. If broken, the legislation penalized the offending person one hundred dollars.⁶² Quarantine dominated political and medical responses in Mississippi during the Early Republic as it did throughout the nation.

At the time Mississippi became a state in 1818, the first public health department in Natchez was established. By 1819, the legislature passed the first law requiring licensure for doctors and surgeons. The 1819 act did not penalize those without license, necessitating an 1820 bill that fined unlicensed physicians five hundred dollars.⁶³ In 1821 and 1827, Mississippi created more censors for enforcement, but then in 1836, the state Supreme Court nullified all licensing boards because the State disliked the growth in governmental power. As a result, no one regulated the medical profession in Mississippi for forty-six years, until 1882.

This does not mean that the medical profession was entirely removed from state intervention. In 1846, Mississippi legislature created a vaccine depot to administer the smallpox vaccine to its constituents. Dr. Felix Underwood contended the law “was indeed ahead of its day.”⁶⁴ In its continued fight against infectious diseases, Mississippi also passed a law in 1857 which permitted local authorities to do what “they may deem expedient” to combat contagious

⁶¹ Felix Underwood, M.D., Public Health and Medical Licensure in the State of Mississippi, 1798-1937 (Jackson: The Tucker Printing House, 1938): 14.

⁶² *Ibid.*, 14.

⁶³ *Ibid.*, 135-136.

⁶⁴ *Ibid.*, 19.

ailments.⁶⁵ Despite the lack of medical licensure, Mississippi attempted to promote public health, at least against illnesses such as smallpox, yellow fever, and TB. The Civil War, however, interrupted the struggle. Devastating the economy as well as the landscape and population in the South, the Civil War took resources and attention away from public health, and Mississippi, like the rest of the South, fell behind in many areas, including public health. No more legislation against disease passed in Mississippi until 1876.

With Reconstruction nearing an end, Mississippi's congress created a board of health for the counties of Hancock, Harrison, and Jackson. These health departments on the coast served their local populations, but given their position, they also patrolled for ships carrying infected passengers.⁶⁶ Quarantines frequently were enacted as a protective measure. In 1877, Mississippi created a state board of health, which included provisions for sanitation measures. Since there was not much funding, the first endeavors focused on educating the public.⁶⁷ When Mississippi suffered from a yellow fever epidemic the following year, legislators finally appreciated the importance of the State Board of Health. Funds increased from \$1,500 to \$46,550, with an additional \$45,000 in 1882 for quarantines. That same year, doctors again became subject to state licensing regulations.⁶⁸ Treatment and defense against disease in Mississippi thus followed the national trend of quarantine, education, and sanitation during the end of the nineteenth century.

Although sanitationists (those who promoted sanitation measures) and Progressives pushed through broad social reforms in other states, Mississippi again fell behind the national average since virtually no further legislation promoted public health measures until 1910 when

⁶⁵ Ibid., 20.

⁶⁶ Ibid., 21.

⁶⁷ Ibid., 31.

⁶⁸ Ibid., 38-39.

fifty-three percent of Mississippians were found to be suffering from hookworm disease.⁶⁹ That year, responding to the crisis, legislators passed act after act pertaining to public health and licensing after the Rockefeller Commission provided ample funding to Mississippi for its fight against hookworm. The Rockefeller Commission sponsored many national endeavors, but its continued support in Mississippi stimulated the state's advancement to a leader in public health. Field units were created to treat the afflicted individuals (many of whom were children) and to teach sanitation to the public. Congress also appropriated money to start a bacteriological laboratory, "which was to become one of the State's strongest weapons in disease control."⁷⁰ Public health had finally become a priority in the state, and the focus on modern technology and the newest treatments dominated. Mississippi finally began to catch up with the rest of the nation as the doctors in Mississippi "indeed only began boasting publicly about the advances made in American medicine shortly after the turn of the century."⁷¹

In 1912, Mississippi established the office of State Sanitary Inspector and the Bureau of Vital Statistics. Finding estimates for tuberculosis deaths before 1912, or any other cause of death, is therefore difficult. The Bureau of Vital Statistics required reporting of births and deaths and gave uniform categories to report the statistics, and as a result, estimates for tuberculosis deaths become more reliable. Also in the same year, physicians had to attend a "reputable medical college" to receive a medical license.⁷² The Office of State Factory Inspector, which was created in 1914, protected workers against dangerous working conditions and long hours. Some of the poor working conditions consisted of workrooms that lacked ventilation, which helped spread TB from one worker to another. Full-time county health departments began in

⁶⁹ Ibid., 50.

⁷⁰ Ibid., 52.

⁷¹ Ruth Janet Severson Haug, "From the Ground Up: The Institutionalization of Public Health Administration in Mississippi," (Master's thesis, Mississippi State, 1995): 52.

⁷² Underwood, Public Health and Licensure, 1798-1937, 146.

1915, and legislators developed campaigns to promote hygienic measures for children and other Mississippians. The mouth health program, for instance, taught proper ways to brush and floss teeth. It garnered attention within and outside of the United States.⁷³ These measures started the Mississippi's ascension to a leader in public health in the early 1900s, and the positive attention served as a source of pride for the state. The Mississippi State Sanatorium in 1916 would soon bring even more praise in recognition for the state's public health measures.

⁷³ Ibid., 84.

CHAPTER 3

DEVIATIONS IN TREATMENT: THE HISTORY OF TUBERCULOSIS IN AMERICA

For the unlucky ten to twenty percent of people who inhale dust or air containing the tubercle bacilli, the body's defenses do not isolate and contain TB to a latent form. The bacteria multiplies in small liquid tubercles (cavities) in the lung and kills healthy tissue. As the lung literally consumes itself from the inside out, patients begin exhibiting symptoms. Eventually the infected individual dies by drowning in the fluid that fills the lungs, wasting away from malnutrition and exhaustion, or hemorrhaging to death. Spurred by the terror of a slow and agonizing consumptive death, people have demanded action against the dreaded disease. Beginning in the early 1800s and continuing into the present, the focus of TB treatment remained consistently on dealing with the host rather than the bacterial infection. Consequently, the therapeutic response to TB in the United States has revolved around the patient and societal contributors, rather than the eradication of the disease.

During the first half of the 1800s, consumption, as tuberculosis was then called, constituted approximately twenty percent of all deaths in America.⁷⁴ The term "consumption" emerged, in part, from the weight loss brought on from the disease but also explained the frightened mental state of the suffering individual.⁷⁵ Katherine Ott describes consumption as an illness "not just of the body, but also of mind and of spirit."⁷⁶ By the 1830s, most Americans were familiar with the symptoms and diathesis of consumption, such as fever, loss of weight, pale complexion, flushed cheeks, bright eyes, cough, and, most notably, hemorrhaging.⁷⁷ Although Girolamo Fracastorius first theorized that the disease was contagious in 1546, by the

⁷⁴ Shelia M. Rothman, Living in the Shadow of Death: Tuberculosis and the Social Experience in American History (New York: Basic Books, 1994): 13.

⁷⁵ Ott, 1.

⁷⁶ Ibid., 1.

⁷⁷ Rothman, 14.

mid 1600s, French researchers convincingly argued to the world that the illness was constitutional and contagious.⁷⁸ Americans, therefore, viewed consumption as hereditary. The dominant medical thought further asserted that the disease was incited or “irritated” by individual behaviors, such as alcoholism, immorality, masturbation, intense anger, depression, and rigorous study.⁷⁹ These “exciting causes” prompted a person genetically predisposed to consumption to develop an active infection.⁸⁰

During the Victorian Age, consumption became romanticized. The consumptive patient-- thin, pale, red cheeks, bright eyes, delicate, and vulnerable-- epitomized the ideal of female beauty.⁸¹ William Cullen Bryant and other authors often depicted heroines in such a manner that consumption not only garnered sympathy for the leading woman, but also ennobled her.⁸² Consumptive sufferers were enshrined in a bed, surrounded by family, and prepared for death who “came calling like a lover.”⁸³ For men, the disease brought on heightened moments of genius, although they were characterized as more effeminate. In both genders, however, the deathbed scene promised sanctification as the “mind triumphs over the body.”⁸⁴ Of course, the romantic ideal belonged primarily to the middle class, since the disease required long periods of rest, an economic cost the working class could not afford.⁸⁵

As a result of the romanticized view of consumption and the dominance of humoral medicine, treatment revolved around boosting the body’s natural response and building its

⁷⁸ Michael E. Teller, The Tuberculosis Movement: A Public Health Campaign in the Progressive Era (New York: Greenwood Press, 1988): 15; Rene and Jean Dubos, The White Plague: Tuberculosis, Man, and Society (New Brunswick, N.J.: Rutgers University Press, 1987): 28.

⁷⁹ Rothman, 4.

⁸⁰ Ott, 35-37; Rothman, 14.

⁸¹ Ott, 12-13.

⁸² Dubos, 48.

⁸³ Ott, 14.

⁸⁴ Ibid., 14-15; Dubos, 53.

⁸⁵ Ott, 16.

defenses. Medical professionals diagnosed the disease based on physical characteristics. Some physicians provided treatments, such as opium, to ease the pain from breathing or coughing, but by the 1850s, most practitioners felt “a sense of impotence” in treating consumptive patients.⁸⁶ Since the medical profession had not yet risen to a place of authority, family, usually female relatives, typically provided care for the patient. Caring for the ill family member “was considered both a privilege and a duty.”⁸⁷

The standard treatment for consumption varied. For men, doctors frequently prescribed travel, fresh air, and exercise; this therapy enabled the infected male to actively participate in the search for a cure. For women, doctors adopted a treatment for tuberculosis similar to that later used for the question of how women would fit into a modern world and why many women seemed emotionally and physically upset with their confined role.⁸⁸ The rest cure for both “the Woman Question” and TB involved complete bed rest for months on end without any form of stimulation. For women, then, the cure required the patient to be passive. Despite those trends, not all doctors proscribed the same treatment, especially for men. As one historian, Rene Dubos stated, “medical practices are influenced directly or indirectly by the prevailing and fashionable scientific dogmas and by temperamental behavior.”⁸⁹ The treatment of TB during the 1800s was no exception. Physicians responded to medical trends that constantly altered the locations advised for treatment. At various points, the preferred location for treatment shifted from overseas in the Mediterranean, to coastal areas in the South, to dry air and rugged living of the West, and finally to places of high altitude in the North. Again, the expense involved in

⁸⁶ Georgiana Feldberg, Disease and Class: Tuberculosis and the Shaping of Modern North American Society (New Brunswick, N.J.: Rutgers University Press, 1995): 15.

⁸⁷ Rothman, 71.

⁸⁸ Barbara Ehrenreich and Deirdre English. For Her Own Good: Two Centuries of the Experts' Advice to Women (New York: Anchor Books, 2005): 5.

⁸⁹ Dubos, 136.

travelling meant the disease was a bourgeois disease and not one of the lower socioeconomic classes. Those without the means to chase the cure suffered in alms houses or in their own homes. Since consumption's progression could not be predicted, men and women were expected to fulfill their duties of marriage and procreation while living with the disease and seeking a cure.⁹⁰ Women and men constantly felt the fear of death as a result of their disease, but still, they attempted to function normally within the community. Individuals struggled with reconciling the two. Many went through the motions while remaining emotionally unavailable for their children or spouses. Therapy for consumption during most of the 1800s focused on the individual: both the family predisposition and the body's response to climate and "irritating" factors.

In the late 1800s, Robert Koch proved the existence of the tubercle bacillus and thereby expanded the germ theory. Most herald Koch's work as the catalyst in understanding the disease as tuberculosis, although it initially, like many medical developments in the late 1800s and early 1900s, did not receive a warm welcome by medical professionals. Most historians agree that it took years before medical practitioners in the United States accepted Koch's findings, but Dubos presents Koch's work as one "immediately regarded as a landmark" by the medical community.⁹¹ Still, the germ theory revolutionized social conceptions of TB.⁹² Disease was now "unclean," and, as it became understood as a social disease, tuberculosis became associated with the poor rather than the middle class.⁹³ In part due to scientific nationalism (America's

⁹⁰ Rothman, 23-24.

⁹¹ Dubos, 102.

⁹² Dubos objected strongly to this view of Koch. Dubos even states how Koch wrongly "became the pope of medical science" (102). Due to this overemphasis, Dubos and Teller seek to diminish Koch's image by arguing that Koch was not the first to discover the germ theory. Jean-Antoine Villemin demonstrated in 1861 the infectious nature of tuberculosis, but only through mastering experimentation techniques did Koch find concrete proof. Dubos explains the widely accepted view of Koch by stating, "in science the credit goes to the man who convinces the world, not to the man to whom the idea first occurs" (102).

⁹³ Ibid., 66; Feldberg, 5.

pride in its homegrown science), the medical community in the United States was slow to accept, if it accepted at all, scientific discoveries made overseas.⁹⁴ Koch's work only became more accepted, for example, once Americans were able to blend the germ theory with their own social understanding of disease. In the late nineteenth and early twentieth century, Progressives sought to link disease with public health, and the largest threat to public health, they asserted, came from social ills, such as environmental and moral problems. The "seed and soil metaphor" developed so that people believed that a germ, if introduced to a susceptible host, would develop into an illness.⁹⁵ The bacteria was considered necessary to developing tuberculosis, but a person's environment and physical resistance remained essential. Physicians and public health officials acknowledged that "poverty and social misery contributed to the development of the disease."⁹⁶ Treatment, therefore, revolved around ridding social problems associated with poverty, educating the public, and encouraging the individual's natural resistance.

In the first decade of the twentieth century, morbidity due to TB remained high, but the death rate from tuberculosis in 1900 had declined from the mid-1800s. Despite the failure of earlier attempts for a national organization, a national anti-tuberculosis movement now emerged as part of the larger Progressive Movement. The reason for success lay not only with fear of the disease or increased specialization, but also with the nature of the Progressive Movement. Like Progressives, anti-tuberculosis leagues stressed education, hygiene, hospitals, governmental regulations, and nursing. They also both believed in increased specialization and efficiency. To meet these goals, the National Tuberculosis Association (NTA) formed in 1904.

The NTA depended on mutual cooperation among those who formed its base. Although the medical field gained authority, prevention required the cooperation of everyone, and only

⁹⁴ Feldberg, 138.

⁹⁵ Tomes, 42.

⁹⁶ Feldberg, 4.

through individual choices could the NTA break the chain of infection. The medical beliefs of the period influenced early prevention programs. Urbanization appeared a factor in spreading TB. New York state, for instance, ranked fourth in the highest death rate from TB, and one of largest populations of infected individuals resided in the “Lung Block” of New York City— the largest city in America in 1900.⁹⁷ Obviously, the cities themselves could not be eliminated, but the problems within them—poor sanitation, overcrowding—could. Problems arose, however, when the public wanted to focus on therapy while physicians wanted to concentrate on prevention.⁹⁸ The medical profession stressed prevention, and for them, educating the public on the disease took precedence. This education consisted of information in newspapers, circulars, film, posters, traveling exhibits, and public talks. Physicians supported the creation of “Tuberculosis Day” in 1911 to spread public awareness. The public, however, would have preferred a cure.

Nevertheless, during the first decade of the twentieth century, state governments increasingly provided appropriations to fight tuberculosis. By 1910, funding reached a national average of \$9,000,000 a year.⁹⁹ As public health programs grew, the anti-tuberculosis movement gained even more support. Legislation was passed to prohibit spitting and to require doctors to report tuberculosis patients. The laws proved difficult to enforce, which led to questions about effective means of prevention. The anti-tuberculosis movement also sought financial support from the public. The Red Cross and eventually the NTA sponsored Christmas Seal campaigns, which sold stamps to raise funds for the movement. The Christmas Seal campaign attracted attention to the cause and provided a sizeable income for the NTA. Subsequently, the National

⁹⁷ Richard H. Shryock, National Tuberculosis Association 1904-1954: A Study of the Voluntary Health Movement in the United States (New York: National Tuberculosis Association, 1957): 77.

⁹⁸ Ibid., 88.

⁹⁹ Ibid., 118.

Tuberculosis Association created a list of objectives in dispersing their funds. The top five consisted of education through propaganda or the creation of local tuberculosis societies.¹⁰⁰

Unfortunately, these informative aids did little to curb the infection rate.¹⁰¹

In the midst of this tension between focusing on prevention or cure, disagreements also arose over therapeutic abortions. Since the Victorian Age, physicians and the public alike had commented on how tuberculosis in women worsened after the birth of a child.¹⁰² One medical text claimed that after delivery, “the disease resumes a more rapid progress, and soon terminates in death.”¹⁰³ By 1910, doctors believed the health of woman superseded domestic duties, such as child bearing. One medical book stated that terminations were preferred in the early decades of the 1900s to prevent a “flare-up” during the nursing period.¹⁰⁴ Although abortions carried the risk of sepsis (a life threatening infection), medical professionals believed the high risk associated with carrying the pregnancy to term justified a therapeutic abortion and outweighed the potentially negative consequence. TB then became the leading cause for doctor-induced abortions until the 1930s.¹⁰⁵

Other intervention measures also caused tension. Public nurses who visited homes with tuberculosis patients encountered resistance as they attempted to Americanize immigrants and “enlighten” them with the science of sanitation. Poverty and cultural differences made acceptance of anti-tuberculosis methods, such as keeping windows open and separate sleeping quarters for the infected, problematic. Statistics collected by Ellen LaMotte in 1908 found that

¹⁰⁰ Ibid., 134-135.

¹⁰¹ Feldberg, 89.

¹⁰² Rothman, 107.

¹⁰³ Quoted in Rothman, 107.

¹⁰⁴ Hugh Trout, An Appraisal of the Surgical Treatment of Pulmonary Tuberculosis (Roanoke, Virginia: Southern Surgical Association, 1931): 7. Louisiana State University, Baton Rouge, Louisiana.

¹⁰⁵ Leslie J. Reagan, When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867-1973 (Berkeley: University of California Press, 1997): 64.

1,008 of the 1,160 homes visited (86%) were unhygienic because of careless consumptives, while other studies in New York City found thirty percent of families to be “unteachable.”¹⁰⁶ Since the disease was thought to be contracted during childhood, the preventorium emerged in 1909 to teach at risk children proper hygiene, exercise, and behavior. The growth of the preventorium, although noticeable, did not compare to the rise of the sanatorium, and by 1933, the National Tuberculosis Association withdrew support of preventoria due to lack of efficacy.¹⁰⁷

As prevention proved limited in efficacy, the focus on treatment once again took precedence. Sanatoria emerged as the perfect storm of medical authority, expert care, efficient system, and the public’s desire to quarantine the infected. With a reform-minded populace, the national anti-tuberculosis movement developed. It nurtured Progressive ideology and borrowed from medical beliefs of the time. Despite all of the many products of the anti-tuberculosis movement during the first half of the 1900s, the sanatorium remains the most known. As the historian Teller argues, Americans in the early twentieth century believed that “ultimately, breaking the chain of infection required the isolation of the infected in sanatoria and hospitals where sanitary precautions could be inculcated by professions and where the often elusive cure was most likely to be found.”¹⁰⁸

Tuberculosis in Mississippi

Through Mississippi’s history, the state followed a more regional pattern before adopting national trends. New Englanders long knew of tuberculosis and experienced epidemic breakouts in the 1700s.¹⁰⁹ During colonization and the Early Republic, Mississippi, like the South, possessed few densely populated areas, and these supposedly tuberculosis-free areas became

¹⁰⁶ Teller, 76.

¹⁰⁷ Cynthia Connolly, Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970 (New Brunswick, N.J.: Rutgers University Press, 2008): 108.

¹⁰⁸ Teller, 78.

¹⁰⁹ Shryock, 32.

destinations for infected individuals who were seeking the cure. In the early 1800s, many people even associated consumption with New England's urban sections. But by 1850, rural areas and the South quickly surged to reach approximately the same level as New England.¹¹⁰

Moreover, its conditions proved favorable for smallpox, diphtheria, and especially yellow fever. Most early legislation, then, dealt with isolating these epidemic diseases that plagued the state. Relatively little evidence exists about tuberculosis before 1900 due to the lack of morbidity reporting. With a population of 1,551,270 in 1900, Mississippi ranked twenty-third in the nation in the highest deaths from tuberculosis.¹¹¹ Still largely rural, Mississippi experienced an unusually large number of tuberculosis deaths, with the majority (58.7%) being of African American decent.¹¹² Although African Americans comprised the majority of TB deaths throughout the first half of the twentieth century, the number of beds made available to them at sanatoria remained proportionally less.¹¹³ For instance, in 1938, beds in the Mississippi State Sanatorium were divided on a quota— one bed for every 4,000 white people and one bed for every 25,000 black people— even though the total deaths from TB in Mississippi was 309 whites to 855 blacks.¹¹⁴

In spite of the State's neglect of a sizeable group of citizens with TB, Mississippi began to champion the Sanatorium as the holy grail of the anti-tuberculosis crusade at the very moment that the NTA was becoming skeptical of the efficacy of the sanatoria in treating the disease. The NTA's shift in its stance on the sanatorium might reflect, in part, the growing dissatisfaction with

¹¹⁰ Ibid., 31-32.

¹¹¹ Underwood, 172; Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York, A Handbook of the Prevention of Tuberculosis (New York: The Charity Organization Society, 1903): 84.

¹¹² Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York, 84.

¹¹³ Calder, 55.

¹¹⁴ Marie Gertrude Butler, M423: *Recollections of the Sanatorium*. University of Southern Mississippi, Hattiesburg, Mississippi; Calder 55.

patients undergoing rest therapy in the institution. On the surface, the sanatorium seemed like the perfect public health solution. Moreover, since patients were no longer chasing a cure, they placed their care and their money in the trust of local experts who isolated them from the population at large. Many patients felt unhappy with this supposed ideal situation due to low results in terms of cure rates. A few sanatoria began closing as a result, but since medical therapy rarely abandons all prior methods immediately when new developments are made, many sanatoria lingered for a couple of decades even though many patients dreaded its rest cure.

CHAPTER 4

THE CREATION OF THE MISSISSIPPI STATE SANATORIUM AND THE DOMINANCE OF THE REST CURE

Before coming to Mississippi in 1909, Dr. Henry Boswell made a promise to a friend who was dying from tuberculosis. Boswell pledged to continue in the battle against TB and not to let others suffer as his friend had.¹¹⁵ Boswell, like many other participants in the anti-tuberculosis crusade, knew the disease first hand. Like his patients, he, too, had suffered from and survived the disease. Similar to present-day cancer survivors, those who conquered tuberculosis felt the drive to raise public awareness and find a cure. Boswell dedicated his life to that end, and with his medical expertise and experience as a public health worker, he advocated for what he believed was the best hope for a cure through the creation of a tuberculosis hospital in Mississippi. Boswell's initiatives came at a fortuitous moment. With other people championing the same cause, his personal motives aligned perfectly with political agendas and public demand. Politicians, such as Theodore Bilbo, and local citizens petitioned the legislature for a facility. Through their combined efforts, the goal of the Mississippi State Sanatorium would be realized.

Mississippi women played an important role in this. During the turn of the twentieth century, women increasingly entered the public sphere by applying Victorian gender ideology to their actions. White middle class women argued that they could best administer public reform measures since women, by nature of their sex, were better suited to serve the community. The argument provided them with authority over the wellbeing of women and children, and it opened opportunities in suffrage, careers, recreational amusements, and political influence. Through middle class women's reform activities, female activists created, as Robyn Muncy states, "a

¹¹⁵ "Dr. Henry Boswell Keeps a Promise to Dying TB Victim," State Times, April 17, 1955.

female dominion.”¹¹⁶ Muncy uses the example of child welfare programs, beginning with the efforts of Jane Addams, Florence Kelley, and other women in the Hull House settlement movement. From grassroots organizations, women carved a position for professional women in the public sphere, and they achieved success with the Children’s Bureau and the Sheppard-Towner Maternity and Infancy Act.¹¹⁷ Success in pregnancy and child health care reform soon spread to health care in general.

In Mississippi, women’s clubs began forming in 1898 and gained in popularity and influence by the first decade of the twentieth century.¹¹⁸ With the proliferation of women’s clubs in the state, individual and county federated clubs joined to form the Mississippi Federation of Women’s Clubs, which oversaw two hundred fifty clubs. The associations reached a wide range of interests, including horticulture, art, literature, research, and public health. The groups also supported pride in both the United States and the state of Mississippi. Usually, most meetings began with the Pledge of Allegiance and then the “Mississippi Song,” which spoke of the women’s duties: “we will keep the white star spotless and will guard its destiny.”¹¹⁹ When asked what a woman’s club was, the editors of *The Woman’s Club Pamphlet* stated that it was “a place where kindly thought is cherished, where high ideals are fed and nourished.”¹²⁰ The Women’s Clubs went beyond simply discussing ideas, however. The public welfare department of the Mississippi Federation of Women’s Clubs “aim[ed] to ascertain the best standards available for

¹¹⁶ Robyn Muncy, Creating a Female Dominion in American Reform (New York: Oxford University Press): 2.

¹¹⁷ *Ibid.*, 41.

¹¹⁸ Mississippi Federation of Women’s Clubs, Bulletin of Federation News, August 1926, vol. 1, no. 3, Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

¹¹⁹ Mississippi Federation of Women’s Clubs, Mississippi Woman’s Magazine, April 1934, Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi. This is not to be confused with the official state song of Mississippi but rather the official song of the Mississippi Federation of Women’s Clubs.

¹²⁰ Mississippi Federation of Women’s Clubs, *The Woman’s Club Pamphlet*, 1928-1929, Z1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

public welfare work and to interpret then in club study and action in the community.”¹²¹

Reflecting this, their motto was “am I my neighbors keeper?”¹²² The Women’s Club combined this Christian service, public action, and modern medical intervention.

In 1916, Women’s clubs in Mississippi became politically involved for the sake of public health. As one of the clubs for women, the Daughters of the American Revolution (DAR) typically worked to promote patriotism, memories of American history, and education so people can perform “the duties of American citizens.”¹²³ Despite the DAR’s more patriotic focus, the *Bulletin of Federation News* was considered the “official organ for Mississippi Federation of Women’s Clubs and the Mississippi DAR.”¹²⁴ The Mississippi DAR, therefore, worked closely with the Women’s Clubs and expanded its scope to include public welfare. In 1916, both the Tupelo Mutual Culture Club and Mary Stuart Chapter of the DAR petitioned their state representative, Senator T.K. Boggan, for a facility to care for and treat those suffering from TB. The Women’s Clubs succeeded in their request when Boggan presented the petition to the State Senate and sponsored the bill for a state tuberculosis facility. These local female organizations argued the economic and human loss to TB demanded an institution to address the state’s problem with the disease.¹²⁵

¹²¹ Mississippi Federation of Women’s Clubs, *Mississippi Woman’s Magazine Bulletin*, December 1928, vol. 3, no. 5. Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

¹²² Ibid.

¹²³ Mary Katherine Paine/Daughters of the American Revolution, *Baton Rouge Chapter Records, 1925-1990*. Hill Memorial Library, Louisiana State University, Baton Rouge, Louisiana. The Mary Stuart Chapter of the DAR is now defunct, and its records have not been preserved. The closest chapter whose records were available was in Baton Rouge. Although this citation is from the Baton Rouge chapter, its objectives in the 1920s basically coincide with the current national objectives of the DAR found at <http://www.dar.org/natsociety/whoware.cfm>, and can therefore be assumed as close to the Mississippi chapters’ aims.

¹²⁴ Mississippi Federation of Women’s Clubs, *Bulletin of Federation News*, August 1926: 1. Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

¹²⁵ Mississippi State Legislature, “Presentation of Petitions,” *Senate Journal* (1916): 482.

While women's clubs provided a large impetus for the sanatorium, other groups also contributed to its creation. This is visible in the selection of Magee, Mississippi as the site for the Sanatorium.¹²⁶ Located forty miles south of the capital, Magee stood on "the highest elevation along the line of the Gulf & Ship Island Railroad between Jackson and the coast."¹²⁷ The town of Magee and Simpson County donated eighty acres of land, and the lumber giants Eastman, Gardiner and Company donated one hundred sixty acres of land for the institution. The backing of Eastman, Gardiner and Company portrayed a different approach from big businesses in Mississippi. They did not exploit their workers as the infamous robber barons did. Rather, with the support of the company, the workers and local citizens felt invested in and cared for by the lumber business. David Higgs asserts, "the prosperity they [the workers] shared with Eastman, Gardiner and Co. caused them to raise their goals and plan for a better future."¹²⁸ Additionally, the Gulf & Ship Island Railroad helped the citizens of Magee raise two thousand dollars for the start of the sanatorium.¹²⁹ While the Gulf & Ship Island Railroad (G. and S.I.) may have possessed progressive ideas, such as welfare capitalism, its contribution could have been more utilitarian. Magee was located along the railroad, and the creation of the Sanatorium would likely provide more business for the Gulf & Ship Island Railroad. The G. and S.I. line may also have been attempting to appear philanthropic. Having acquired a massive amount of land to become near monopolistic, the G. and S.I. railroad was sure to feel the pressure of anti-big business politicians. The newly elected Democratic governor in 1916, Theodore G. Bilbo, made clear his plans to attack the G. and S.I. line, and during his tenure, "one of the early and

¹²⁶ Mississippi State Board of Health, Annual Report of the State Board of Health of the State of Mississippi, 1915-1917 (Jackson, Mississippi: State of Mississippi, 1917): 25.

¹²⁷ Ibid.

¹²⁸ David Higgs, "Eastman, Gardiner, and Co. and the Cohay Camps: A Mississippi Lumber Empire, 1890-1937," (Master's thesis, Mississippi College, 1991): 88.

¹²⁹ Henry Boswell, M.D., Biennial Report of the Bureau of Tuberculosis and the Tuberculosis Sanatorium, July 1, 1925 to June 30, 1927 (Jackson, Mississippi: Mississippi Board of Health, 1927): 4.

favorite targets of Bilbo's political fire was the G. and S.I."¹³⁰ Still, from its inception, the Mississippi Sanatorium was based upon and fueled by community support.

The Mississippi State Sanatorium also had the encouragement of Theodore Bilbo. Against monopolies and in favor of higher education and public health, Bilbo pushed through many Progressive programs during his years in office, but his openly racist policies, marital infidelity, and propensity to accept bribes earned him the title "redneck liberal" by many Mississippians.¹³¹ Bilbo had a distinct if peculiar interest in the medical profession; he participated in everything from sponsorship of Doctor's Day to frequent clandestine meetings with young nurses.¹³² In his inaugural address, Bilbo asserted that the "most important necessities of the State[s] demand should be provided," and in the abbreviated list, Bilbo mentions the need for a "Tubercular Hospital."¹³³

With the backing of Bilbo, the state legislature passed a bill allotting \$25,000 to building the Mississippi State Sanatorium. In the congressional journals, little debate exists on the question of the bill, and it passed speedily through both houses. Clearly, Bilbo was not alone in support of the Sanatorium. In 1917, Governor Bilbo requested the legislature to appropriate another \$22,000 for a water and sewage plant for the Sanatorium, and finally, in 1918, the sanatorium opened to serve Mississippians suffering from tuberculosis.¹³⁴ Also in 1918, Bilbo wrote to the legislature asking for more hospitals and aid for the Board of Health, and he also

¹³⁰ Chester M. Morgan, Redneck Liberal: Theodore G. Bilbo and the New Deal (Baton Rouge, Louisiana: Louisiana State University Press, 1985): 26.

¹³¹ *Ibid.*, 1.

¹³² A. Wigfall Green, The Man Bilbo (Baton Rouge, Louisiana: Louisiana State University Press, 1963): 60. Chester Morgan in Redneck Liberal showed just how far Bilbo's infatuation with the medical community could go. Morgan cited doctors who claimed hospitals and training wards for nurses "became Bilbo's favorite resort. He was an almost...nightly visitor" (63).

¹³³ January 18, 1916, Inaugural Address, Box 1, Folder 10, M2: The Papers of Theodore G. Bilbo. University of Southern Mississippi, Hattiesburg, Mississippi.

¹³⁴ Mississippi State Legislature, "Governor's Messages," House Journal (1917): 69.

requested more appropriations for the Mississippi State Sanatorium as it was in need of “other buildings and equipment [to] increase the efficiency of the institution.”¹³⁵

The medical community further provided support for the Mississippi State Sanatorium. Even with the NTA’s faith in the efficacy of sanatoria wavering, physicians in Mississippi believed a hospital was needed for tuberculosis patients. Dr. Henry Boswell repeatedly worked through his early roles as a public health worker in Mississippi for a tuberculosis hospital. When the bill for the Sanatorium went up before the legislature, Boswell brought a group of people infected with TB to the capital. These patients “testified both visually and verbally as to their need for such an institution” and “drove home more forcibly than any other method could have done the need for the sanatorium.”¹³⁶

Boswell’s connections allowed him contact with the then executive officer of the Mississippi Board of Health, Dr. W.S. Leathers. On January 7, 1916, the *Daily Clarion-Ledger* published an article titled “State Badly Needs a Home for Consumptives: Dr. W. S. Leathers, Director of Public Health Talks on This Subject.”¹³⁷ Leathers spoke on behalf of the entire medical profession and public health program in Mississippi when he stated, “It is the idea of the members of the medical profession” that a facility be provided for those suffering from tuberculosis.¹³⁸ With “proper medical treatment,” Leathers argued, tuberculosis can be cured, and he seemed to try to elicit both government and public support when he stated, “It is the duty of the State to provide” and “This is also necessary...to protect those who are well and free from

¹³⁵ January 10, 1918, Message from Governor to Legislature, Box 1, Folder 11, M2: The Papers of Theodore G. Bilbo. University of Southern Mississippi, Hattiesburg, Mississippi.

¹³⁶ Philip P. Jacobs, *The Control of Tuberculosis in the United States* (New York: National Tuberculosis Association, 1932): 199.

¹³⁷ “State Badly Needs a Home for Consumptives: Dr. W. S. Leathers, Director of Public Health Talks on This Subject,” *The Daily Clarion-Ledger*, January 7, 1916: 8.

¹³⁸ *Ibid.*

infection.”¹³⁹ If only for self-interest, Leathers pleaded for everyone’s support, and through his appeal, the tie among the medical profession, government, and public again appears.

Boswell was at the center of these three factors. His marriage to Iola Saunders Boswell afforded him some political connections since his wife’s father had served for two terms in the State Legislature and was active in Lafayette County politics.¹⁴⁰ With or without his wife’s contacts, Boswell obtained political alliances. In a letter dated August 17, 1919, Governor Bilbo asked Boswell for help against “these damn scoundrels” who tried to hurt Bilbo’s political reputation.¹⁴¹ The fear of changes in the tax commission further prompted writing the letter, as changes in state revenues would decrease aid to programs, including the Sanatorium. Bilbo pleaded, “We have done our work well so far and we must not stop the onward march...I know of no man in the state that can help more than you. Now, release your war dogs and sick them on.”¹⁴² Bilbo apparently believed Boswell would and could use his personal and professional connections to help in the political campaign. Bilbo used the common interest of public health and the Sanatorium to arouse, in the least, Boswell’s personal desire to continue the Sanatorium. Boswell responded quickly, saying Bilbo’s administration had been “one of the most constructive in Mississippi’s history” and that Bilbo could “feel free at any time to call upon me for whatever I may be able to do in the promotion of your constructive ideals.”¹⁴³ Boswell’s connections seemingly served both politicians and public health, and those alliances would continue through the majority of the life of the Mississippi State Sanatorium.

¹³⁹ Ibid.

¹⁴⁰ Calder, 215.

¹⁴¹ Theodore G. Bilbo to Henry Boswell, August 17, 1919. Z/1280.000 S: The Boswell (Henry) Collection, 1926-1958. Mississippi State Archives, Jackson, Mississippi.

¹⁴² Ibid.

¹⁴³ Henry Boswell to Theodore G. Bilbo, August 20, 1919. Z/1280.000 S: The Boswell (Henry) Collection, 1926-1958. Mississippi State Archives, Jackson, Mississippi.

By 1920, the Sanatorium had increased in value so that the state government appropriated over a million dollars to increase the buildings and bed capacity, and from 1921 to 1927, further funding was given to the Sanatorium again to enlarge the facilities to accommodate more patients.¹⁴⁴ From its birth to the Great Depression, money appropriated to the Sanatorium continually focused on increasing the number of beds so that more patients could be treated. The rest therapy evidently dominated the first decade of the Sanatorium, and the community continued to fund the Sanatorium and believe the Sanatorium's methods in the twenties were effective.

In 1928, a large sum, \$330,000, was appropriated to the Sanatorium for the purpose of creating a preventorium.¹⁴⁵ Since people usually were exposed to TB during childhood, preventoria were institutions for children considered at risk of developing TB. Ninety percent of individuals who acquired the tuberculosis bacteria never developed an active infection, and physicians believed individual hygiene and resistance determined who contracted active infections.¹⁴⁶ Preventoria aimed at teaching correct sanitary measures for children who would likely be or have been exposed to the disease. The Mississippi State Sanatorium was one of few sanatoria that had a preventorium as part of its facilities.¹⁴⁷ By 1933, however, the National Tuberculosis Association withdrew support of preventoria due to lack of efficacy.¹⁴⁸ Without the NTA's support for its preventorium, the Sanatorium had to find value in other treatments.

In sanatoria, patients often developed a deep malaise as the months of treatment dragged into years. They endured long hours of rest every day, sometimes as much as twenty-three hours at a stretch. The mental toll led many to leave the facility before treatment had arrested or

¹⁴⁴ Calder, 280.

¹⁴⁵ Calder, 288.

¹⁴⁶ Barry, 63; Tomes, 136.

¹⁴⁷ Connolly, 78.

¹⁴⁸ *Ibid.*, 108.

“cured” the disease.¹⁴⁹ As a result, sanatoria usually designed a social atmosphere for their patients. The Mississippi State Sanatorium provided movies, religious services, a library, a patient social club (the Sunshine Club), a patient newspaper (*The Thermometer*), materials for craftwork, a three-acre lake for scenic walks, a swimming pool, golf, radios, fishing, and tennis. Ideally, the various offerings of the Sanatorium created contented patients. The Sunshine Club, for instance, sought to provide entertainment for their fellow patients, such as movies, and organized book bazaars to fund activities. Usually, patients active in the Sunshine Club also worked for the paper, writing articles, drawing political cartoons, or editing stories. The newspaper, *The Thermometer*, mainly provided news within the Sanatorium, such as profiles of incoming and outgoing patients, and the paper included articles about new treatments and buildings on the Sanatorium grounds.¹⁵⁰ Even when subjected to bed rest, individuals within the institution could feel part of a larger community.

Despite various programs, patient discontent could not completely be eradicated. By 1930, approximately eighteen percent of the patients discharged from the Mississippi State Sanatorium left against physician orders as “unimproved.”¹⁵¹ Those who left against doctor’s advice could not gain re-entry. This rule attempted to serve as a check to those longing to leave. Mississippi, even by 1938, was ranked fourth lowest in the nation in the number of beds for tuberculosis deaths, but despite such pressure to remain in the Sanatorium, patients continued to leave.¹⁵² With the fiscal pressures of the Great Depression, the Sanatorium would have to find a new method to stay alive.

¹⁴⁹ Rothman, 243-244.

¹⁵⁰ Butler, 75-82.

¹⁵¹ *Ibid.*, 95. This statistic was gained by taking the unimproved group from 1930 (80 patients) and dividing it by the total discharged patients (443).

¹⁵² *Ibid.*, 63.

PART II

THE SURGICAL AGE

CHAPTER 5

THE TURNING POINT: DECLINING SUPPORT FOR SANATORIA AND FISCAL HARDSHIPS

The Mississippi State Sanatorium emerged, as did many of the state's public health policies, rather late. Most American sanatoria were built in the first decade of the twentieth century. There were earlier institutions in Europe that served as models for these U.S. establishments. The first sanatorium was established in 1859 by the physician Hermann Brehmer in Germany. Brehmer based treatment at his sanatorium only on exposure to fresh air and a good diet. In 1876, Peter Dettweiler, another German physician, developed a course of therapy based on new climatological and medical beliefs of the time. His treatment stressed a mountain location, a good diet, fresh air, sponge baths, wine, and rest.¹⁵³ Borrowing from the German model, Dr. Edward Trudeau opened the first sanatorium in the United States, the Adirondack Cottage Sanatorium. The mountain air in Saranac Lake, New York was, at the time, the most prescribed location for TB sufferers, and cold night air was believed the best for patients to breathe. Consequently, even in freezing temperatures, patients slept on open porches or with windows open, hoping the uncomfortable sacrifice would bring them a longer life. These sanatoria served as a prototype for all other sanatoria to follow. Yet even as the rest treatment and physician's authority grew in popularity for a couple of decades, patient dissatisfaction and the inability to treat the disease effectively eventually led to a crisis for the sanatorium. As other institutions across the nation closed their doors, the Mississippi State Sanatorium found a

¹⁵³ Bates, 38-39.

solution in surgical therapy and consequently redirected funds to surgery rather than the increasingly contested rest cure.

In the sanatorium, infected individuals no longer chased a cure across the country but rather found treatment in a local institution. Called sanatorium (a hospital for chronic disease, from the Latin “sano,” meaning to heal) instead of sanatarium (a health resort, from the Latin “sanitas,” meaning health), the facilities for TB patients endeavored to use scientific solutions to combat the disease.¹⁵⁴ With patients isolated in the institution, physicians held power over them to enforce the prescribed cure of absolute rest. Sanatoria seemed to offer hope to the local citizens, and Progressives pushing sanitation and other public health measures believed the sanatorium could win the battle against tuberculosis. The facilities themselves seemed to offer a physical representation in the fight against tuberculosis. Patients inside the sanatoria may have felt differently. Treatment in the sanatoria relied upon long, boring hours of rest to encourage the body’s natural defense against the invading bacteria. Many patients vacillated between optimism and despair. Throughout patient recollections of life in the sanatorium, a search for hope and purpose permeates their writings, yet to stave off the constant threat of loneliness and depression, the institution and the patients within them formed their own world.

From the first day of their arrival, patients recalled feeling boredom and isolation. In his memoir *Pages Written in a Hospital*, Reverend William Medler described his entrance as “a new life,” but his “new life” began with tears.¹⁵⁵ In the first days at the sanatorium, Medler attempted to fill the quiet rest hours with recitations of Bible verses and with thoughts that he would soon return home.¹⁵⁶ Eventually, this was not enough to fill his despair. The rest cure required

¹⁵⁴ Butler, 146.

¹⁵⁵ William H, Medler, *Pages Written in a Hospital*, (New York, American Press Publications, 1963): 45.

¹⁵⁶ *Ibid.*, 45.

complete rest, a liberal diet, and constant temperature taking. During rest hours, which could comprise as much as twenty-one hours of a day, patients were not permitted to write letters, rise to use the bathroom, read, or talk.¹⁵⁷ Even after months or years of being in a sanatorium, patients experienced homesickness and were prone to depression.¹⁵⁸

As a result of boredom, patients attempted to find excitement through other activities. Like inmates in a prison, the distribution of mail brought this wanted change during the day. Letters contained news from home, encouraging words from loved ones, money for small purchases, or promises of upcoming visits.¹⁵⁹ Sometimes, patients turned to pranks, such as messing with the light switches or turning off water valves in rooms, but overwhelmingly, patients formed relationships with the other people at the sanatorium in order to overcome the sterility and emptiness of their confined lives. Friends comforted each other when family members died, collected money for necessary expenditures, and played games to pass the time.¹⁶⁰ Frequently, these connections turned into life long friendships. With the daily contact between male and female patients, occasionally romantic relationships blossomed, which the patients playfully called “cousining.”¹⁶¹ The term “cousin” could simply mean a romantic attachment devoid of sex. Still, young men often solicited their “cousin” for more intimacy, and sexual encounters between patients, regardless of age or marital status, occurred.

Although visiting hours were extremely short and limited, patients enjoyed having company. In their letters and memoirs, the sick wrote in detail about who came to see them and when they could expect another visit. Medler remarked how staying at the Sanatorium brought

¹⁵⁷ Ibid., 26.

¹⁵⁸ Ibid., 85; Richard Ray, *Saranac, 1937-1940: A Memoir* (New York, Historic Saranac Lake, 2005):

46.

¹⁵⁹ Medler, 50.

¹⁶⁰ Richard, 36.

¹⁶¹ Ibid., 13, 30.

him in contact with old friends and relatives, and at Saranac, patients took pictures of their guests. To the confined, visitors brought conversation and news. Visitors reminded patients of an outside world that seemed so distant from the microcosm of the sanatorium, but most importantly, they provided company for the isolated sick.

Relationships also formed between patients and the staff. Young men frequently wrote of the pretty nurses who took their temperature and pulse, and they liked to be photographed with nurses “who made...the infirmary more than just an existence.”¹⁶² When nurses left, patients lamented their departure. “I’ll miss her,” remarked one patient when his nurse left.¹⁶³ With physicians usurping family roles in caring for the sick, nurses replaced the void that resulted. Nurses were considered by many to be friends, listeners, conversationalists, and sources of hope.¹⁶⁴ Medler even paid tribute to the doctors for “their careful and efficient attention to their patients.”¹⁶⁵ While Shelia Rothman argues that many patients detested the staff, memoirs and letters of select sanatoria describe the kind bedside manner of their doctors and nurses.¹⁶⁶

To combat the loneliness and isolation, sanatoria developed numerous forms of entertainment for the patients. Most provided radios, golf courses, movie viewings, scenic walkways, lakes to fish, religious services, libraries, crafts, bulletins, card games, restaurants/cafeterias, and various social events. The Mississippi State Sanatorium attempted to create a social world for its patients, including a patient newsletter, *The Thermometer*, and a patient social club called the Sunshine Club. At Saranac, the New York sanatorium also attempted to distract its patients from the rest cure with style shows and a Winter Carnival. Since weight loss or gain was thought to determine the progression of tuberculosis, most

¹⁶² Ibid., 24, 41.

¹⁶³ Ibid., 74.

¹⁶⁴ Ibid., 42.

¹⁶⁵ Medler, 133.

¹⁶⁶ Rothman, 244.

sanatoria provided sizeable and wholesome meals. In letters home from Saranac, patients described in detail their meals and weight gain, and while most enjoyed the Jello and desserts, patients were offered milk frequently during the day to boost recovery.¹⁶⁷ Within a few months, Medler gained over seventeen pounds and said of his changed weight, “This was evidence of the adequacy of the food.”¹⁶⁸ Through entertainment, food, and various activities, the sanatorium attempted to distract the suffering, but ultimately the “spirit of the sanatorium” depended on the patients.¹⁶⁹ To deal with their own mortality and the constant presence of death, patients created their own language and worlds in which to survive. Ideally, the sick who survived left with “very many life long friendships or romances...or very pleasant” memories.¹⁷⁰

The sanatorium, however, did not succeed in creating positive memories with all patients, and it alienated many of those it sought to treat. In 1905, the National Tuberculosis Association declared that sanatoria were designed to treat and prevent the spread of tuberculosis.¹⁷¹ To prevent the disease, tuberculosis cases needed to be caught early. In the incipient stage, tuberculosis patients could be educated on proper hygiene and behavior to avoid active tuberculosis, the most fatal stage. The NTA found people admitted during the early stage were also more likely to be cured, while those in the later stages had a seventy-five percent mortality rate after five years of treatment.¹⁷²

However, catching the infected before the terminal stage and providing the facilities for all those sick proved difficult. Consistently, states lacked enough beds in their sanatoria to accommodate all of those with tuberculosis. Moreover, public health workers and physicians

¹⁶⁷ Melder, 65; Richard, 30.

¹⁶⁸ Melder, 68.

¹⁶⁹ Butler, 16.

¹⁷⁰ Rothman, 259.

¹⁷¹ Shryock, 155.

¹⁷² Ibid.

could not consistently catch the disease in its early phases, and as a result of the failure of doctors and facilities, “sanatoriums accomplished little in the preventative sphere.”¹⁷³ Treatment of the active stage required a strict regimen of rest and an adequate diet. A cure, however, could not conclusively be found, and the inability to deliver the promise of a cure created disgruntled patients. The confinement and misery some patients felt with the rest cure led many patients to leave the Mississippi State Sanatorium and other institutions against medical direction. Isolation of the disease, then, was minimal at best. Infected individuals could not be kept from healthy members of the general public, both because of the shortage of beds and also because of patients’ choices to leave. By 1912, many criticisms continued to assault the institution even for simple isolation of the disease.¹⁷⁴ Studies by private groups showed little correlation between treatment at a sanatorium and survival rate of patients when compared to those who took the cure in their own homes. Thomas Mays said sanatoria were “proceeding on a blind trial” and “had not ‘accelerated one whit’ [in terms of] the falling mortality rates in Philadelphia or elsewhere.”¹⁷⁵ Patient dissatisfaction had necessitated rethinking the sanatorium and its method of treatment, and the NTA sided with the disappointed patients.

Abandoning the facilities was not an option, however, since doing so would fail to fulfill societal expectations for public health. The public, which had invested funds and entrusted their loved ones to the facilities for treatment, had come to believe the sanatorium met an important public health role. In the least, it served as a visible reminder that the state was fighting tuberculosis. For Mississippians, their state sanatorium served also as a source of pride. Moreover, physicians, who had promised that following their orders would bring a cure, could not withdraw support from the sanatorium. Doing so would perhaps irrevocably damage their

¹⁷³ Ibid., 155.

¹⁷⁴ Barbara Bates, 266.

¹⁷⁵ Ibid., 266.

professional authority, which they had only recently obtained.¹⁷⁶ The sanatoria responded by attempting to keep pace with the science of the time, but in the early twentieth century, advances in treatment remained hindered by the differences in tuberculosis. Sanatoria had developed more social activities for their patients, but despite these changes, the rest cure continued to frustrate the public and medical community into the 1930s. In addition to patient discontent and the decline of national support, the hardships brought by the Great Depression forced the sanatorium to change its methods of treatment or face having its doors closed.

Not far from Jackson, the Mississippi State Sanatorium resided in Magee, a fairly representative town in Mississippi during the Great Depression. Since small cities and agricultural life still dominated Mississippi in the first half of the twentieth century, Mississippi's economy, largely cotton based, insulated the state from the financial growth of the 1920s as well as the hardships during the first few years of the depression. By 1933, however, four years after the infamous stock market crash, Mississippi also felt the Great Depression, and many residents and institutions experienced financial woes.¹⁷⁷

In the years leading up to the Great Depression, Mississippi politicians, the public, and the Sanatorium continued to build these connections that had begun in the Progressive Era. Re-elected for a second, nonconsecutive term in 1928, Governor Theodore G. Bilbo continued pressing for increased aid for public health measures. By now, much of the medical community knew of his passion for medicine and had formed ties with Bilbo. With his re-election, letters poured into his office from Mississippi and beyond. One letter from Oscar Dowling, the Louisiana Department of Health medical president, congratulated Bilbo, saying, "your splendid

¹⁷⁶ Ibid., 266.

¹⁷⁷ Bradley G. Bond, Mississippi: A Documentary History (Jackson, Mississippi: University Press of Mississippi, 2003): 209.

state health officers have told me much of you...Your success is so richly deserved.”¹⁷⁸ Even the general public sent letters of congratulations. Mrs. Jamie W. Johnson, a loyal supporter, congratulated Bilbo and specifically thanked him for his prior efforts in establishing hospitals, including the charity hospital in Vicksburg.¹⁷⁹ Clearly, the association among government, physicians, and the public remained important.

In his second inaugural speech, Bilbo reminded the legislature, “tax money spent in relief of the sick...is never misspent. It is bread cast upon waters.”¹⁸⁰ He also applauded and vocally supported the efforts of the State Board of Health. Bilbo went so far as to say, “no other department of state or governmental agency has accomplished so much for the economic wellbeing of our citizenry.”¹⁸¹ The governor frequently equated health with economics in an attempt to legitimize and increase support for public health. This view was reflected in the Mississippi State Sanatorium’s newspaper, which claimed the institution was “a financial investment because of lives saved and valuable citizens returned to active pursuits of professions.”¹⁸² When the Sanatorium appealed for more money, the *Jackson Daily News* supported the plea.¹⁸³ The Mississippi legislature agreed and appropriated \$570,000 to the maintenance and improvement of the Sanatorium.¹⁸⁴

¹⁷⁸ Oscar Dowling to Theodore G. Bilbo, January 17, 1928. Box 35, M2: The Papers of Theodore G. Bilbo. University of Southern Mississippi, Hattiesburg, Mississippi.

¹⁷⁹ Jamie W. Johnson to Theodore G. Bilbo, January 19, 1928. Box 35, M2: The Papers of Theodore G. Bilbo. University of Southern Mississippi, Hattiesburg, Mississippi.

¹⁸⁰ Inaugural speech of Governor Theodore G. Bilbo, January 17, 1928. Folder 2, Box 107, M2: The Papers of Theodore G. Bilbo. University of Southern Mississippi, Hattiesburg, Mississippi.

¹⁸¹ Ibid.

¹⁸² *The Thermometer*, August 1927. Z/1280.000 S: The Boswell (Henry) Collection, 1926-1958. Mississippi State Archives, Jackson, Mississippi.

¹⁸³ Logan H. McClean, “Cordial Approval for an Editorial: TB Sanatorium in Need of What it Asks,” *Jackson Daily News*, March 3, 1928.

¹⁸⁴ Butler, 96.

Although public health spending per capita in Mississippi declined to six cents per year, the Mississippi State Sanatorium remained a priority at the start of the Great Depression.¹⁸⁵ The state started building a sewage treatment plant in 1930 to replace the older and less efficient one from 1920. Operational in 1931, the investment of the plant, while necessary, showed the Sanatorium continued to be important enough for improvements and additional appropriations. Appropriations for the Sanatorium began to decline in 1929 with a loss of \$345,000, but the year before, Bilbo had demanded and received \$570,000 for further construction to the Sanatorium.¹⁸⁶ In truth then, the 1929 budget of \$225,000 still remained higher than the 1927 allotment of \$190,000.¹⁸⁷ What at first glance appears to be a decline in 1929 actually represents sufficient funds to maintain, rather than expand the facility. For the next two years, appropriations settled at \$235,000, but then experienced a sharp drop. By 1935, the Mississippi State Sanatorium only received \$160,000 from the state, the lowest amount since 1919.¹⁸⁸ In 1938, funds decreased to a brutal \$20,000.¹⁸⁹ Clearly, the Great Depression had reached the Sanatorium. Although important, public health was not impervious to the fiscal hardships of the time, and since Bilbo had moved onto the federal legislature and become mired in scandal, he could no longer agitate the state's congress for more funds for the Sanatorium.

In 1932, letters began pouring into the Sanatorium addressed to the business manager, John H. Rowan. In the correspondence, the economic hardships that existed across the nation began to be visible. Many letters were from creditors asking for the locations of previous patients who were behind on loans or other payment plans. As creditors became desperate in their search for people who had defaulted on their loans, they contacted the Sanatorium in hopes

¹⁸⁵ Bridgforth, 11.

¹⁸⁶ Butler, 96.

¹⁸⁷ Ibid.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

of finding new addresses. The effects of the Great Depression could also be seen in responses inquiries for jobs at the Sanatorium. For example, Rowan told J.W. Foltz, a local resident inquiring about employment, “The situation seems discouraging at the present time. I do not have a thing I can offer you.”¹⁹⁰ By 1934, the Baldwin Company wrote the Sanatorium about delinquent payments for a piano the institution purchased.¹⁹¹ The twenty-dollar monthly payment was late for several months, indicating the growing fiscal problems of the Sanatorium.

In 1934, Rowan frantically wrote Senator Littleton Upshur about an appropriation bill for the Sanatorium that was sent back to committee. Rowan demanded to Upshur, “For God’s sake, see to it that some standpatters be put on the committee... don’t let any grass grow under your feet, you hear?”¹⁹² The Sanatorium needed continued state funding, and the threat of losing financial assistance led Rowan and others to panic. Unfortunately, his fear was realized, since the legislature continued to decrease appropriations until the end of the decade.

As the personal correspondence of the business manager and state legislation show, the Sanatorium clearly suffered from monetary shortages during the Great Depression. As a result, executive decisions led to budget cuts. For the few beginning years of the depression, the Sanatorium did not see much difference in assistance and consequently avoided curtailing any activities or functions. In 1932, however, the Sanatorium began making cuts, starting with *The Thermometer*. The newspaper for the Sanatorium contained articles from doctors on medical treatments for tuberculosis as well as information about the disease itself. It also had articles from patients, lists of incoming and outgoing residents, new books, jokes, poems, and movies of

¹⁹⁰ John H. Rowan to J. W. Foltz, December 11, 1930. Box 9706, Series 1700: Tuberculosis Sanatorium Correspondence. Mississippi State Archives, Jackson, Mississippi.

¹⁹¹ Baldwin Piano Company to John H. Rowan, September 15, 1934. Box 9706, Series 1700: Tuberculosis Sanatorium Correspondence. Mississippi State Archives, Jackson, Mississippi.

¹⁹² John H. Rowan to Littleton Upshur, March 23, 1934. Box 9706, Series 1700: Tuberculosis Sanatorium Correspondence. Mississippi State Archives, Jackson, Mississippi.

the week. With a small circulation, *The Thermometer* cost the Sanatorium more than the income it brought, and despite the pride patients held in the newspaper, it was the first item to go during the Great Depression.

In 1934, other entertainment activities were cut, at least temporarily, to assuage the budget crisis. Movies were discontinued. Also, the library's collection budget was cut to nothing, and the search for a full-time librarian ceased.¹⁹³ Also, the Sanatorium's preventorium was closed for most of the year to reduce operating costs. Boswell had campaigned for a long time to build the preventorium for the children, and after its closure, he railed, "I have no patience whatsoever with any person in possession of good health and mental faculties who goes about whining and complaining about business depression. The poor fool is blessed by God and doesn't know it."¹⁹⁴ Boswell believed preserving health was priceless, even during the Great Depression, but his focus remained on treatment of those who were already sick.

Because of the financial difficulties of the Mississippi State Sanatorium, the Mississippi legislature had to pass a law in 1934 providing \$1,598.05 to cover the deficit of the Sanatorium during the 1930-1931 fiscal year. Unpaid statements from Central Wholesale Company, R.E. Kennington Company, and Rice Furniture Company stood as outstanding bills for the Mississippi State Sanatorium, and House Bill 620 helped prevent any litigation against the state.¹⁹⁵ With further help of the government, the preventorium re-opened with additional funds to teach local children hygiene, but the preventorium was shut down again in 1937 for eight months. More importantly, that same year one hundred patients were discharged from the Sanatorium to defray an increasing lack of money.¹⁹⁶ Even though the Sanatorium could not

¹⁹³ Butler, 78.

¹⁹⁴ Boswell (Henry) Manuscript Collection, Z/1280.000.

¹⁹⁵ Mississippi State Legislature, "HB620," House Journal (1934).

¹⁹⁶ Calder, 294.

escape the budget cuts resulting from the Great Depression, the continued financial support showed the institution remained valuable to the state. Yet, its value was predicated on the Sanatorium's ability to keep up with the latest medical treatment. The Sanatorium's allocation of funds showed that teaching hygiene to at risk children, amusing patients, and increasing the number of beds for more patients were no longer priorities.

Although the state legislature appropriated additional funds in 1938 to cover the deficits of the previous fiscal year, the money did not go to the preventorium or to increase the bed capacity of the Sanatorium even though Mississippi had one of the lowest bed to patient ratio in the United States. To provide rest therapy to all those infected, the Sanatorium needed more beds than they had in 1938. By closing beds, the Sanatorium not only saved money, but also exhibited a change in focus. At the same period the Mississippi State Sanatorium was reducing beds, it purchased surgical equipment and hired a renowned chest surgeon, Dr. J. S. Harter. At this time, Dr. Harter was considered one of the top three thoracic surgeons in the United States, and although his coming to the Mississippi State Sanatorium increased the institution's reputation and surgical capabilities, Harter did not come cheaply. The Great Depression forced decisions on how best to use funds in the Sanatorium, and surgery took priority over increasing bed capacity.

The Mississippi State Sanatorium's shift towards surgery finally reflected the national trends. The decline of national support, especially from such respected organizations as the National Tuberculosis Association, led many Americans to question the efficacy and its rest cure. By 1939, a Gallup poll found only 13% of the general public still had faith in the sanatorium modeled by Saranac.¹⁹⁷ The country's declining support for sanatoria coupled with

¹⁹⁷ George Gallup, *The Gallup Poll: Public Opinion, 1935-1942* (New York: Random House, 1985): 162.

the financial troubles of the Great Depression, then, forced sanatoria to find a new form of therapy or close their doors. Although Mississippians continued to support their state sanatorium, they did so on the condition that the Sanatorium remained modern, using the newest scientific developments to produce clear results. The changes in the Mississippi State Sanatorium portray the fight of the sanatorium to survive and its extreme shift to surgery for legitimacy in the Surgical Age of the 1930s.

CHAPTER 6

THE TURN TO THORACIC SURGERY: SURGICAL AND POLITICAL SUPPORT

After graduating from high school in Laurel, Mississippi, Guy Campbell began thinking about what to do with his adult life. His future at nineteen years old seemed promising with the possibility of college, but those prospects quickly turned bleak when he began coughing up blood. Previous symptoms of weight loss and a cough had been misdiagnosed as bronchial trouble. His lung hemorrhages, however, provided the classic and undeniable symptom of pulmonary tuberculosis. Ten years earlier, Campbell's father had died of the same illness, and since exposure to the disease was thought to occur in childhood, doctors assumed that Campbell's father had tragically infected his own son. Although Campbell's family may not have known the dangers of exposing a child to contamination, they knew how destructive tuberculosis was and just how fatal it could be.

Despite knowledge of the disease's existence that stretched back thousands of years, tuberculosis (TB) in America during the first half of the twentieth century was not yet curable, and the recommended treatment was to enter a sanatorium. While in the sanatorium, patients faced the vast majority of each day resting in isolation from the outside world, a treatment that normally lasted for several years, during the prime of their lives. Active infections usually were found in people in their early twenties, as in Guy Campbell's case. Campbell's bright future appeared shattered by a bacterium. His only hope for arresting the disease was to go into a sanatorium, and in 1936, Campbell gained admittance to the Mississippi State Sanatorium in Magee, Mississippi, where he stayed for five years. Campbell adhered to the strict regime of constant rest, ate the specified diet, and avoided any stimulating activity. His efforts proved

rewarding as his disease went into remission. Guy Campbell attended college, became a doctor, and lived for over fifty years after his entry into the Sanatorium.¹⁹⁸

At first glance, Campbell's experience appears unremarkable and fairly representative of TB patients at sanatoria. In fact, the treatment he received for tuberculosis seems to prove the effectiveness of sanatoria and the rest cure. During his hospitalization, however, he did more than simply rest. Campbell underwent artificial pneumothorax, a surgical procedure that collapsed the lung by filling sections of the pleural cavity (the space in between the linings around the lungs) with air. By the late 1930s, seventy to eighty percent of patients at the Mississippi State Sanatorium underwent the same procedure.¹⁹⁹ Pneumothorax encouraged rapid remission of TB and allowed the patient to resume a more active life outside the confines and restrictions of the sanatorium. Doctors hailed pneumothorax procedures as "the greatest advance in three thousand years in the treatment of tuberculosis" and other surgical operations on the chest as "a great step forward in the battle against this disease [TB]."²⁰⁰

Surgical techniques to combat pulmonary tuberculosis focused on collapse therapy. Collapse therapy applied the sanatorium's principle of rest to the diseased portion of the body, namely the lungs.²⁰¹ By immobilizing the affected area(s), less pressure was exerted on the cavities containing the bacteria, which reduced coughing, hemorrhaging, and the potential spread of the bacteria to other sections of the lungs and body. Also, the diseased section continued to receive oxygenated blood to foster healing without the strain of functioning. Doctors believed the rest and oxygen-rich blood would improve the patient's illness. By 1939, several procedures had been developed and mastered, and articles arguing the effectiveness of the surgeries flooded

¹⁹⁸ Calder, 235-246.

¹⁹⁹ Ibid., 20.

²⁰⁰ Mississippi State Department of Health, Box 9636, Series 2131: Mississippi Board of Health Staff Conference Minutes, 1940. Mississippi State Archives, Jackson, Mississippi; Singer, 125.

²⁰¹ Calder, 32.

medical literature. Many physicians now believed the rest cure in sanatoria to be “a false hope.”²⁰² Dr. Hugh Trout speculated in 1937, “The average sanatorium head is today still keeping patients on bed rest in a vain endeavor to clear up advanced disease when many such patients could be restored to a life of economic usefulness by the modern methods of so-called surgical compression.”²⁰³ Surgery was the cure for the future.

Artificial pneumothorax was celebrated as the most effective surgical means to arrest the progress of tuberculosis. Pneumothorax procedures actually began in 1898 when Dr. John Murphy first experimented in Chicago; however, the procedure and thoracic surgery, in general, did not gain widespread usage until after World War I. During the Great War, chest wounds were commonplace, and experiments to operate effectively on soldiers improved knowledge of chest operations and advanced thoracic surgery as a whole. With new information on how to operate on the chest, surgeons began experimenting more with pneumothorax procedures. The June 1929 issue of *Archives of Surgery* named the procedure “the most valuable” treatment of TB.²⁰⁴ The November 1932 *California and Western Medicine* labeled the results from pneumothorax “miraculous.”²⁰⁵ In the November 1933 issue of *California and Western Medicine*, Dr. Carl Howsen called pneumothorax “the greatest single advance in the treatment of tuberculosis in the past generation.”²⁰⁶ Similarly, Dr. Felix Underwood claimed pneumothorax procedures were “the greatest advance in three thousand years in the treatment of

²⁰² Alexander, 3.

²⁰³ Ibid.

²⁰⁴ Ralph C. Matson, M.D., “The Electrosurgical Method of Closed Intrapleural Pneumolysis in Artificial Pneumothorax,” *Archives of Surgery* 19, no. 6 (June 1929): 1175.

²⁰⁵ John W. Nevius, M.D., “Bedside Medicine for Bedside Doctors,” *California and Western Medicine* 37, no. 5 (November 1932): 319.

²⁰⁶ Carl R. Howson, M.D., “Tuberculosis Cavities: Their Significance, Prognosis, and Treatment,” *California and Western Medicine* 39, no. 5 (November 1933): 304.

tuberculosis.”²⁰⁷ Medical literature in the 1920s and 30s overwhelmingly approved of the artificial pneumothorax procedure, and while the technique was discussed in detail, pneumothorax was considered the simplest and primary choice of surgical treatment.

Artificial pneumothorax required the surgeon to fluoroscope the patient. While the traditional x-ray photographs provided clearer pictures, the fluoroscope allowed moving images to be captured for the surgeon’s benefit. After capturing the necessary images, surgeons could more successfully conduct an artificial pneumothorax. An incision was made where a long needle attached to a pneumothorax machine was inserted into the lining (pleura) around the lungs. No more than two hundred cubic centimeters of air were injected in the first operation, and the introduction of air in the area surrounding the lung resulted in increased pressure and collapsed portions of the lung.²⁰⁸ As with any surgery, infection of the pleura or stitches could occur, but of special note, pneumothorax could cause pleural diffusion, which is a build-up of pleural fluid in the pleural cavity. Increased fluid typically caused inflammation of the lobes of the lung and subsequent coughing. Another negative consequence of the operation was pneumonia.

The pneumothorax procedure especially affected pregnant women with tuberculosis. As discussed in an earlier chapter, since the early 1900s, therapeutic abortions had been performed to spare the life of the mother. Pregnancy lowered immunity and increased the chance for reactivation of latent infections. Pregnancy also worsened symptoms of active TB to the point physicians considered pregnancy a threat to the mother’s life. With the increased availability and effectiveness of the artificial pneumothorax, doctors no longer believed therapeutic abortions the best course for the mother. Dr. Hugh Trout stated that if “the pregnancy has gone to five or

²⁰⁷ Felix Underwood, M.D., Mississippi Board of Health Staff Minutes, April 20, 1940, Box 9636, Series 2131: Staff Conference Minutes. Mississippi State Archives, Jackson, Mississippi.

²⁰⁸ Singer, 120.

six months, the patients are allowed to go into labor because such is not any more taxing than the procedures necessary to terminate the pregnancy.”²⁰⁹ Trout suggested that pregnant women with later stages of TB should undergo pneumothorax procedures during the pregnancy for the benefit of both the mother and fetus saying, “Now we use collapse [therapy] until after danger incident to pregnancy has passed.”²¹⁰ The danger of surgery and possible ill effects of pneumothorax on the mother and unborn child were deemed acceptable by the 1930s.

Not all pneumothorax resulted in a collapsed lung. Pneumothorax procedures that could not collapse an overwhelming majority of the diseased section were considered unsuccessful. Inflammation and scarring of the lungs due to illnesses or infections could cause small fibrous tissues to grow in the pleural space, and typically, these adhesions between the lobes and the pleural lining interfered with the operation. These adhesions accounted for approximately forty percent of failed pneumothorax surgeries.²¹¹ To overcome pleural adhesions, surgeons developed techniques to cut the tissue that prohibited surgical deflation of the lung. This method was called pneumolysis. Initially, the physicians simply cut adhesions, but the risk of severing a vein or part of the lung was considerable. Infection and building of fluid could also result. By 1929, scientists had invented a method of removing the adhesions through electrosurgical means. Instruments detached the connecting fibers with electrical pulses, which effectively cauterized the tissue immediately. Deaths from surgical error and blood transfusions necessitated by dangerous cutting declined significantly following adoption of the new technique. By 1938, however, Dr. B. P. Potter warned against use of any pneumolysis when a bilateral (both lungs)

²⁰⁹ Trout, 7. The fetus could not possibly survive in the early twentieth century before the eighth month ironically because their lungs would have been underdeveloped. Although the new treatment avoided abortion, the focus remained on the mother and not the fetus.

²¹⁰ Ibid.

²¹¹ Matson, 1175.

collapse was present.²¹² Pneumolysis still retained its worth in combating tuberculosis, and many doctors relied on pneumolysis to remove pleural adhesions. Pneumolysis was considered very effective since only two percent of cases suffered from hemorrhaging.²¹³ By creating more efficient techniques to aid pneumothorax and producing numerous articles on the subject, medical professionals showed that they placed emphasis on surgery in TB treatment.

Other surgical methods marked the dawn of the new age in TB's history. When pneumothorax failed, sometimes attempts to collapse the lung were made in oleothorax procedures. Oleothorax inserted oil in the pleural cavity. Whether vegetable or mineral oil, the added fluid aimed at disinfecting the pleural fluid and filling the pleural cavity so that the lung could not properly inflate. Originating in France in 1922, oleothorax was practiced in America, and by 1936, studies claimed a sixty percent success rate in collapsing the lung with the procedure.²¹⁴ The effectiveness of the operation drew further attention to surgery for TB treatment during the thirties.

Similar to the oleothorax, plombage attempted to collapse the lung by filling the pleural cavity with a paraffin mixture. The paraffin would be heated, sterilized, and then inserted by the lungs to induce a collapse. Although the technique was created in 1913 and used overseas, by 1935, plombage had not attracted a widespread following among American surgeons.²¹⁵ Nevertheless, plombage had American proponents by the 1920s, as surgeons in the United States began to turn to surgery for a cure to tuberculosis.

²¹² B. P. Potter, M.D., "Bilateral Collapse Therapy in the Treatment of Pulmonary Tuberculosis," *Archives in Surgery* 37, no. 1 (1938): 133.

²¹³ Matson, 1183.

²¹⁴ Singer, 122.

²¹⁵ L. Wallace Frank, M.D. and Paul Turner, M.D., "Thoracoplasty in the Treatment of Pulmonary Tuberculosis," *Annals Of Surgery* 107, no. 5 (May 1938): 752.

Similarly, lobectomies, the removal of a lobe of the lung, and pneumonectomies, the removal of an entire lung, were not widely advocated by American doctors during the early years of the Surgical Age. Surgically removing the diseased portion initially appeared too radical and entailed sizeable health risks, but by 1938, thoracic surgery had progressed so that surgeons more frequently employed lobectomies and pneumonectomies.²¹⁶ Scalenectomies, the removal of scalene muscles, were also discouraged in the beginning of collapse therapy. The scalene muscles are three pairs of muscles located in the neck that assist in moving the top rib for breathing purposes. By the mid 1930s, some surgeons discussed the use and effectiveness of a scalenectomy when used in conjunction with another procedure. Scalenectomies, however, did not receive an overwhelming approval by 1934 since some doctors believed the “clinical results attained [from the procedure] thereby do not warrant its performance.”²¹⁷ Lobectomy, pneumonectomy, and scalenectomy, although used, were not as frequently employed as a pneumothorax.

Part of collapse therapy sought to increase the quality of blood to the diseased portion of the lung. Doctors hoped oxygen and nutrient rich blood would encourage healing. Blood transfusions, therefore, aimed at providing a weakened patient with “good” blood. In 1927, Dr. J. L. Yates lamented, “transfusions have not been used as frequently as indicated.”²¹⁸ In 1929, Dr. Yates continued to promote transfusions, especially in cases where patients developed complications following an operation. He focused on careful choice of donors. According to Yates, the ideal donor was a “robust” man who had recovered from TB and was over the age of

²¹⁶ Frederick Rhodes, M.D., “Advances in Tuberculosis Work,” *Journal of the National Medical Association* 30, no. 1 (February 1938): 12; William Rienhoff, M.D., “The Surgical Technic of Total Pneumonectomy,” *Archives of Surgery* 42, no. 2 (1936): 229.

²¹⁷ A. Lincoln Brown, M.D. and Stanley R. Truman, M.A., “Surgery in the Treatment of Pulmonary Tuberculosis,” *California and Western Medicine* 40, no. 1 (January 1934): 29.

²¹⁸ J. L. Yates, M.D., “Rationale of Operations Helpful in Promoting Recovery from Pulmonary TB,” *Archives in Surgery* 14, no. 1 (1927): 376.

thirty.²¹⁹ Although Yates enthusiastically advocated blood transfusions for pulmonary tuberculosis, medical literature on the subject rarely discussed or recommended transfusions. The procedure, while used, was most likely not widely employed by doctors.

Physicians, however, devoted much of their attention to the phrenic nerve. The phrenic nerve is located on either side of the neck and stretches down to the diaphragm. It controls the diaphragm, which forces the lungs to contract and relax in order to promote breathing. Typically, phrenic procedures were conducted in conjunction with either a pneumothorax or thoracoplasty to aid the collapse of the lung. Coughing and pain from inflammation of the lungs usually subsided immediately, and patients were pleased with the quick results.²²⁰ Surgeons differed, however, on which technique was more advisable. Some suggested crushing the phrenic nerve, so the nerve became paralyzed for three to six months. The diaphragm no longer operated fully, and consequently, the lung did not open to full capacity. In a phrenicectomy, the phrenic nerve was cut and twelve to fifteen centimeters removed.²²¹ A review of 4,697 cases from 1925 to 1930 proved 1.2 percent of phrenic operations resulted in complications such as hemorrhage, pneumonia from fluid building in the lungs, and pulmonary embolism (an air bubble in the lung). One half of one percent of these complications resulted in death.²²² The negative consequences, while serious, appeared rare, and the operation on the phrenic nerve by 1929 “had a distinct and valuable place in one’s armamentarium for therapeutic pulmonary

²¹⁹ J. L. Yates, M.D., “Pulmonary Tuberculosis Pathology and Treatment,” *Archives of Surgery* 19, no. 6 (1929): 1151.

²²⁰ H. Morrision Davies, M.D., “The Surgery of Pulmonary Tuberculosis,” *Post-Graduate Medical Journal* (January 1935): 22.

²²¹ Singer, 123.

²²² Frank B. Berry, M.D., “The Unfavorable Results of Phrenicectomy,” *Archives of Surgery* 21, no. 6 (1930): 1126.

collapse.”²²³ Dr. John Alexander argued phrenic operations should be used without hesitation since “The use of a phrenic nerve operation or a pneumothorax for an early TB lesion is even less dangerous than a simple appendectomy. Early surgery for both appendicitis and TB is conservative not radical.”²²⁴

Like other surgical treatments for tuberculosis, thoracoplasties aimed at collapsing the lung by removing ribs. By the early 1930s, surgeons developed a partial thoracoplasty; the partial technique removed a few ribs or sections of ribs above the diseased cavities to collapse only the infected portion. A bilateral collapse (collapse of lobes in both lungs) could be performed with a partial thoracoplasty. A complete thoracoplasty, however, removed several ribs, and initial procedures had a high mortality rate. While both methods could cause slight to severe disfiguration, complete thoracoplasty increased the chance of noticeable changes in the body and the possibility of a special girdle to hold the torso.²²⁵ By the 1920s, a complete thoracoplasty was divided over three or four operations to lessen strain on the patient. Each time larger sections of more ribs were removed. Physicians disagreed over which ribs should be taken first. Sauerbruch believed the lower ribs should be resected first, and surgeons, like Dean Cole and Frank Johns, thought the body benefited from the removal of upper ribs first. Cole and Johns considered the upper thoracoplasty easier on the heart and better focused on the diseased section.²²⁶ Nevertheless, the Wilms-Sauerbruch step-by-step method for rib removal decreased

²²³ Dean B. Cole, M.D. and Frank S. Johns, M.D., “Therapeutic Pulmonary Collapse,” *Archives of Surgery* 19, no. 6 (1929): 1200; Singer, 123.

²²⁴ Alexander, 16.

²²⁵ Ott, 153.

²²⁶ Cole, 1123; Frank B. Berry, M.D., “Massive Atelectasis Complicating Paravertebral Thoracoplasty for Pulmonary Tuberculosis,” *Archives of Surgery* 18, no. 1 (1929): 257.

the fatalities from the operation, and by continuing to better the methods for thoracoplasty, surgeons expressed the value of the operation.²²⁷

Thoracoplasties generally were reserved for cases in which previous surgical attempts failed. Given the extensiveness of the operation and the possible side effects, surgeons and patients waited on thoracoplasty and used it in conjunction with other procedures. Complications consisted of infection, fluid retention (edema), pneumonia, and rib regeneration. Although the ribs removed never grew to the original length, some ribs sectioned regenerated to the point lung collapse became difficult.²²⁸

Statistics differ widely on the effectiveness of the operation. The January 1934 *California and Western Medicine* cites a mortality rate of 1 to 50 percent.²²⁹ The large variation could have been due to poor selection of cases and the delaying of thoracoplasty too long. The May 1938 *Annals of Surgery* cited a larger case study that found poor long term results in patients after ten years.²³⁰ The discouraging findings were because eighty to ninety percent of the patients had been in the advanced stages of tuberculosis.²³¹ In 1931, the *Archives of Surgery* published a study on thoracoplasty at the Sauerbruch Clinic. If the disease was caught early and before severe complications, ninety-one percent were considered “cured” or improved, and only six percent died.²³² Generally, however, other case studies showed patients were improved or arrested in approximately two thirds of the cases.²³³ Despite the varying statistics, surgeons generally recommended a thoracoplasty if adhesions were present and pneumothorax was

²²⁷ Singer, 125; Brown, 30.

²²⁸ Cole, 1203.

²²⁹ Brown, 30.

²³⁰ Frank, 745.

²³¹ Ibid., 749.

²³² B. N. Carter, M.D., “Thoracoplasty as a Method of Treatment in Pulmonary Tuberculosis,” *Archives of Surgery* 22, no. 2 (1931): 289.

²³³ Ibid., 30; Singer, 125.

unsuccessful. Physicians agreed that “a good pneumothorax is better than a thoracoplasty, but a good thoracoplasty is better than a poor pneumothorax.”²³⁴ The surgical value in a thoracoplasty, however, had been proven by the 1930s.

From the mid 1920s through the 1930s, surgery for pulmonary tuberculosis virtually perfected lung collapse techniques, and the medical literature on the collapse therapy increased. In 1922, Dr. Samuel Robinson spoke about the future of thoracic surgery before the American Association for Thoracic Surgery. He noted that extensive surgery for pulmonary tuberculosis was avoided at the time and more experimentation in operations for diseases afflicting the chest was urgently needed.²³⁵ Likewise, the *Annals of Surgery* labeled surgery for TB in 1926 still in “infancy.”²³⁶ Also in the early twenties, the first sanatorium was graded by the American College of Surgeons, which sought to increase the care and facilities for patients undergoing surgery.²³⁷ By seeking an evaluation, sanatoria seemingly placed emphasis on their surgical capability.

By 1929, the tone on surgery for tuberculosis changed in the medical literature. In the December 1929 publication of the *Archives of Surgery* articles on surgery for pulmonary TB alone accounted for roughly twenty percent of the material in the issue.²³⁸ In devoting a fifth of its issue to surgical treatment, the *Archives of Surgery* suggested information on surgery for tuberculosis needed to be spread to more doctors. By 1934, surgical treatment for TB was

²³⁴ Carter, 290.

²³⁵ Samuel Robinson, M.D., “The Present and Future in Thoracic Surgery,” *Archives of Surgery* 6, no. 1 (1923): 253-254.

²³⁶ Frank, 745.

²³⁷ Mississippi State Department of Health, Box 9636, Series 2131: Mississippi Board of Health Staff Conference Minutes, 1938. Mississippi State Archives, Jackson, Mississippi.

²³⁸ This statistic was acquired by adding all the articles on pulmonary TB. Letters to the journal, lists of membership, and demonstrations were not included in the calculation since they are not scholarly articles.

considered well known to patients, and they commonly asked for operations by name.²³⁹ Surgeons estimated that more than thirty percent of patients could benefit from surgical intervention, and by 1935, sanatorium treatment was widely acknowledged to be limited and surgical intervention finally justified.²⁴⁰ The January 1935 issue of *Post-Graduate Medical Journal* claimed, “surgical measures are of value because they accelerate healing or ensure greater certainty or security.”²⁴¹ Overall, the growth and value in thoracic surgery during the mid twenties through the thirties is clearly evidenced in medical journals of the time.

In 1936, in the midst of the institution’s worst fiscal crisis, the Sanatorium hired Dr. John S. Harter as the first chest surgeon in Mississippi and built operating rooms for procedures, such as pneumothorax and thoracoplasty.²⁴² Dr. Henry Boswell claimed at the 1938 Mississippi Board of Health Staff Conference that surgery “is now the quickest route to recovery” and patients returned to work and a more active life faster following a surgical procedure than by rest therapy.²⁴³ At the same conference, Dr. Hickerson applauded the Mississippi State Sanatorium, stating “cures are surer and quicker since the surgical department has been established.”²⁴⁴ Even the Mississippi State Sanatorium published pamphlets stating the institution’s plan for the cure included pneumothorax procedures. In a 1941 report, the Mississippi Board of Health noted that, thanks to surgery, “during this biennium, the number of days each patient has been required to stay in the institution has been reduced.”²⁴⁵ By the mid 1930s, surgeons, public health officials, and other medical professionals considered the Mississippi State Sanatorium as “one of the best

²³⁹ Brown, 25.

²⁴⁰ Ibid., 25.

²⁴¹ Davies, 17.

²⁴² Calder, 236.

²⁴³ Mississippi State Department of Health, Box 9636, Series 2131: Mississippi Board of Health Staff Conference Minutes, 1939. Mississippi State Archives, Jackson, Mississippi .

²⁴⁴ Ibid.

²⁴⁵ Mississippi Board of Health, *Mississippi State Board of Health Report 1939-1941* (Jackson, Mississippi: State of Mississippi, 1941): 80.

in the country.”²⁴⁶ The overwhelming approval of Mississippi doctors led seventy to eighty percent of the patients at the Sanatorium to undergo a pneumothorax by 1941, and, consequently, the Mississippi State Sanatorium gained national prestige.²⁴⁷

Political Support

By the early 1930s, however, the Great Depression had damaged the budgets of both public health institutions and the general population alike. Private relief agencies simply could not absorb the growing number of citizens in need, and their aid was becoming, in the words of muckraker Upton Sinclair, akin to “standing on the brink of the pit of hell and throwing in snowballs to lower the temperature.”²⁴⁸ When Franklin Delano Roosevelt took office in 1933, his New Deal provided both general and work relief for millions throughout the country. Mississippi shared in the programs, but the state differed by overwhelmingly using more work assistance than welfare. Politicians felt work relief would encourage its recipients not to stay in the program longer than a year and a half, and they feared welfare would hurt work ethic and allow the recipients to remain on federal assistance for an extended period. Mississippians did not hold a monopoly on such a belief, however, as many states claimed, “General relief is commonly regarded in the United States as the last line of defense against destitution.”²⁴⁹ Mississippi averaged less general relief than any other state at \$3.03 per family a year in 1941.²⁵⁰ Mississippi’s welfare average was roughly one tenth of averages in other states like New York or

²⁴⁶ Felix J. Underwood, M.D., Box 8381, Series 2028: Office Files of Felix J. Underwood, M.D., 1922-1959. Mississippi State Archives, Jackson, Mississippi.

²⁴⁷ Ibid.; Calder, 20.

²⁴⁸ Upton Sinclair, *The Jungle* (New York: Barnes and Noble Classics, 2003), 232.

²⁴⁹ Donald Howard, *The WPA and Federal Relief Policy* (New York: Russell Sage Foundation, 1943): 51.

²⁵⁰ Not every state abhorred direct assistance like Mississippi. Pennsylvania, for instance, exceeded twice the national average. (Ibid., 69).

Rhode Island.²⁵¹ In work relief, however, Mississippi's expenditures for the Works Progress Administration (WPA) reached 368 times general relief per capita, even though the annual income per citizen in 1937 and 1939 remained between \$200 and \$299.²⁵² Mississippi consistently held more than thirty thousand on their WPA roles, except during 1937 when the numbers dropped below twenty thousand.²⁵³ Clearly, Mississippi politicians preferred participating in the New Deal by spending money on jobs for its citizens, rather than monetary subsidies.

The federal WPA funds were administered by the state legislators. In decisions on which programs to allocate funds for work, the Mississippi legislature had to meet the federal requirements. The projects, among many things, "must have a general public usefulness."²⁵⁴ The decisions served a dual purpose for the benefit of both the individual and the community—helping one meant stabilizing the other. By August of 1932, just as the efforts of the Great Depression were beginning to hit the state, Mississippi Governor Sennett Conner found private relief efforts would not be enough. He quickly created the State Advisory Relief Committee to address the situation. Two years later, the committee's findings concluded that many of the New Deal's programs were a "good deal."²⁵⁵ With the relief committee's approval, Conner did not hesitate to use federal and state funds to aid struggling Mississippians. He dispersed \$4,164,594.14 on work relief and \$1,587,679.35 on direct relief.²⁵⁶ Conner claimed "it is the duty of every modern government...to care for those of its citizens who are unable to provide for

²⁵¹ Ibid., 85.

²⁵² Ibid., 550, 676.

²⁵³ Ibid., 547.

²⁵⁴ Ibid., 141.

²⁵⁵ Sennett Conner, Special Message of Governor Sennett Conner to Mississippi Legislature on the Subject of Relief and Work Relief and Civil Works Administration, January 10, 1934, 353.9762/M69gsp, Mississippi State Archives, Jackson, Mississippi.

²⁵⁶ Ibid., 3.

themselves during such periods.”²⁵⁷ But, Conner stipulated, “Our people did not want charity but only desired an opportunity to earn a living.”²⁵⁸ Conner’s speech gives further insight to popular political thought in Mississippi. The state’s citizens needed assistance, yet welfare was scorned. Work relief, then, became the main policy for combating the Great Depression in Mississippi.

One of the first New Deal programs from which Mississippi accepted aid was the Federal Emergency Relief Administration (FERA), which replaced Herbert Hoover’s Reconstruction Finance Corporation (RFC). Harry Hopkins, who ran FERA, determined states no longer had to match federal funds, and for a few months, Mississippi became one of eight states in which the federal government fully funded the relief received.²⁵⁹ When FDR expanded the New Deal, the WPA provided a large portion of work relief in Mississippi. Bilbo, by then, had been elected as a U.S. Senator for Mississippi, and he used his political clout to control federal funds from the WPA. Bilbo appointed allies and friends to patronage positions in the Mississippi WPA administration. Bilbo also directed WPA money to projects that benefited friends. U.S. Senator Pat Harrison of Mississippi labeled Bilbo’s actions as cronyism, and Harrison disputed these appointments and purged the WPA roles of anyone with the taint of Bilbo.²⁶⁰ Bilbo fought the dismissal of political allies and argued Harrison acted unethically. With political battles between Bilbo and other political officials over control of the Mississippi WPA, a federal investigation took place in 1938 by J.C. Capt.²⁶¹

²⁵⁷ Ibid., 3.

²⁵⁸ Ibid., 4.

²⁵⁹ Larry Whatley, “The New Deal Public Works Programs” (master’s thesis, Mississippi State College), 1965.

²⁶⁰ Chester Morgan, “Demagogue or Democrat: Theodore G. Bilbo and the New Deal” (dissertation: Memphis State University): 1982.

²⁶¹ Ibid.

Even with bribery, appointments of political friends, and incorrect use of funds, the WPA in Mississippi provided substantial assistance to the citizens of the state. A fair amount of WPA expenditures went to public health in the form of sanitation work. Dr. Felix Underwood of the Mississippi Board of Health was quoted as having said, “the success or failure of any government in the final analysis must be measured by the wellbeing of its citizens. Nothing can be more important to a state than its public health; the state’s paramount concern should be the health of its people.”²⁶² Many areas in Mississippi before the Great Depression lacked adequate bathroom facilities, and without proper sanitation, diseases spread, including hookworm. Part of the WPA projects in Mississippi sought to correct the problem. By October 1, 1937, the WPA had already built over 44,000 sanitary toilets, more than 88 lines of new sewers, and 39 miles of new water mains for the state of Mississippi.²⁶³ WPA money was also allocated to the Sanatorium, and again, the administration carefully selected how the federal government’s assistance would be used. If the Sanatorium continued to uphold rest therapy as the best means to arrest TB, logically the funds would have gone into creating more buildings to increase the bed capacity.

Instead, some assistance went into general repairs on the Sanatorium, WPA support was funneled largely into paving sidewalks and roads and developing travelling x-ray clinics.²⁶⁴ When the Mississippi state budget commission wrote a letter to the legislature asking for relief money to pave, it justified the expenditure as a necessity, arguing, “money should be no object in combating the ravages of this the most dreaded of diseases. It is the greatest menace to

²⁶² Underwood, Public Health and Medical licensure in MS 1798-1937, 102.

²⁶³ Kate Brown, “Mississippi WPA Expenditures and Accomplishments,” February 28, 1938, Folder 7, M114: The Papers of Kate Brown. University of Southern Mississippi, Hattiesburg, Mississippi.

²⁶⁴ Calder, 52, 293.

prosperity...the fight we are making is national in its scope...”²⁶⁵ By 1935, more than three miles of driveways and sidewalks were laid by the WPA. Some estimated the value of the new pavement at \$75,000, while it only cost the state \$5,000, but the benefit was “impossible to estimate.”²⁶⁶ The miles of pavement aided in eliminating the dust problem. Dust continued to be considered by many as a vector for spreading tuberculosis, but, more accurately, dust inhibited sterile surgeries. Administrators considered the paving assistance of the WPA to be the most beneficial, since without it, “the extensive surgical program inaugurated by the Sanatorium would have been impossible because of the dust.”²⁶⁷ Using WPA funds for sterile surgical environments showed political backing for the shift to surgery, and the rest cure receded as the dominant method of treatment that politicians supported.

WPA funds also assisted in creating a position for a skilled worker to head the occupational therapy studio. In occupational therapy, the WPA worker taught Sanatorium patients productive skills, especially sewing, knitting, and crocheting for women.²⁶⁸ The studio provided other crafts, but the object was to keep the patients feeling constructive by producing a piece of work, rather than idly enjoying music or movies. Although the patients bought the materials to make their projects, they also showcased their creations in the lobby of the Sanatorium and sold them to visitors.²⁶⁹ The extra money helped patients pay for their treatment, but most importantly, the patients enjoyed the satisfaction of building something with their own hands and marketing the good to the public. Ideally after treatment, those in the Sanatorium could expect to return to their role as productive members of society. The occupational therapy

²⁶⁵ State Budget Commission to Hugh White, Uniform Monthly Report 1933, Box 8734, Series 2033: Tuberculosis Sanatorium Audits. Mississippi State Archives, Jackson, Mississippi.

²⁶⁶ Butler, 101.

²⁶⁷ Calder, 101.

²⁶⁸ Butler, 79.

²⁶⁹ Calder, 234.

shop provided a means to continue to feel constructive while in the Sanatorium. WPA subsidies, moreover, provided renovation of old buildings. Again, the buildings would not house more patients or administrative departments. Instead, in these rebuilt and enlarged structures, departments for surgery, laboratories, and x-ray would be established.²⁷⁰ Dr. Felix Underwood claimed, “The new construction was permanent and fireproof and the surgical unit the most modern that could be devised.”²⁷¹ As beds were cut, buildings were erected to house places to conduct surgery.

The choice of placing WPA funds into paving driveways, renovating buildings for surgery, and establishing an occupational therapy studio demonstrated the shift from rest therapy to surgical therapy in the Mississippi State Sanatorium. Financial pressure from the Great Depression cut appropriations to the Sanatorium, which resulted in the loss of leisure activities and even beds for patients. Yet, state funds met federal subsidies to provide WPA projects for improvements, especially for surgical facilities, for the Sanatorium. The rest cure simply took too long and had hardly proven to be efficient in producing a cure. The state viewed surgery as a possible answer to tuberculosis. This answer would decrease the amount of time and therefore the amount of money the state spent in caring for the patient inside the Sanatorium. Surgery was the next hope for both tuberculosis and the Sanatorium.

²⁷⁰ Butler, 102.

²⁷¹ Felix Underwood, M.D., Public Health and Medical Licensure in Mississippi, 1938-1947, 42.

CHAPTER 7

PUBLIC SUPPORT FOR THE MISSISSIPPI STATE SANATORIUM AND THE SURGICAL AGE

While watching a baseball game outside of Jackson, Mississippi on July 25, 1932, a foul ball hit Marvin Calder in the chest. The next morning Calder coughed up blood. The doctors at the Jackson Infirmary conducted several tests to determine the cause of the hemorrhaging. In an x-ray of his lungs, Dr. Rembert noticed a spot, which was a tell-tale sign of tuberculosis. The physician ordered Calder to apply for entrance into the Mississippi State Sanatorium. A few weeks later, Calder became a patient there. Scared and alone, Calder took the cure. He stayed in bed all day except to bathe. After a couple of months, he was permitted to sit in bed for half an hour a day, and, eventually, Calder was allowed to begin walking around the Sanatorium. His increased mobility afforded him interaction with other patients. In 1933-34, he taught three younger patients for a year, and Calder believed the kindness of the nurses and physicians “soon caught on and [the other patients] were just as caring for each other.”²⁷² After leaving the Mississippi State Sanatorium in 1934, he attended Mississippi State University, and found employment with the USDA. Fifty years after Calder left the Sanatorium, he commented on the now closed facility, “as long as one ex-patient and or employee is living there will be a Sanatorium in the heart.”²⁷³

Like Calder, many who left the Mississippi State Sanatorium with arrested TB felt indebted and thankful to the institution. Former patients and employees’ of the institution frequently recalled a lasting connection with the other patients and workers. Newspaper articles covered the work of the Sanatorium and the good the facility did in the fight against tuberculosis. Women’s clubs magazines consistently mentioned their assistance to the facility and how

²⁷² Calder, 163-165.

²⁷³ Ibid., 165.

necessary the Sanatorium, particularly its outreach projects, was to Mississippi. In general, the public supported the continued presence of the Mississippi State Sanatorium, especially as it replaced the rest cure with surgery. Nothing demonstrates this so well as the fact that the Sanatorium continued to receive funds and financial gifts until its closure in 1976, decades after most other sanatoria had closed their doors. The Sanatorium had been a source of pride for Mississippians. Its national recognition had gained Mississippi positive attention, and the state only gradually let go of the institution.

Patient and employee memories admittedly do not serve as the best indicator of public opinion, considering these testimonials were likely selected by the author of *Mississippi State Sanatorium: Tuberculosis Hospital, 1916-1976* to favorably reflect on the institution and considering the connection the individual held to the Sanatorium. However, the workers and former patients did leave and move about within the state. Most of those who suffered from tuberculosis before antibiotics continued to have annual exams at the Mississippi State Sanatorium to check for a relapse. To enter into the workforce, former patients had to produce a clean bill of health, which kept them in touch with their doctors. Also, many kept in touch with friends made at the Sanatorium, which added further reason to maintain a connection to the institution. Those who survived remembered the diagnosis, the treatment, and the departure rather clearly, even decades later. TB, then, was a life-long illness, and the stay in the Sanatorium impacted the lives of those who suffered from the disease. Undoubtedly, many discussed their situation with their employers, family, or friends, and those discussions with other Mississippians, in part, shaped others' opinions of the institution. For that reason, patient and employee memories do serve as some gauge of public opinion.

Although recounted in an interview over four decades later, Catherine Underwood remembered her stay. In 1938, at the age of two, Catherine came to the Sanatorium. Her mother, Kitty, had been diagnosed with pulmonary tuberculosis and wanted her daughters close to her. Since Catherine and her sister had been exposed to TB from their mother, the preventorium offered the chance to teach the girls hygiene in the hope of avoiding the active form of the disease well as keep them near their dying mother. Recalling her stay in the child's ward in the preventorium, Catherine said, "Someone was always kind."²⁷⁴ One of the nurses, Mrs. Graham, routinely allowed Catherine into her room to play with a music box, and the kindness shown "kept [Catherine] from being as frightened and homesick" as others might have been.²⁷⁵ Although Catherine's mother died in 1941, a portrait of her mother, painted by another patient, served as a fond memory of the mother who died when Catherine was only a child. The nurses and other patients cared for each other, and Catherine Underwood recollected her three-year stay at the Mississippi State Sanatorium warmly even decades later.

The same year that Catherine Underwood moved out of the Mississippi State Sanatorium, Polly Watts also left the institution after a seven-year battle with tuberculosis. Her treatment included having to wear a body brace for eleven weeks and not moving from the bed for over twenty-seven months. One news story in the Jackson *Daily News* reported, "Despite her physical pain and mental anguish, she never lost courage, nor has her winsome smile vanished."²⁷⁶ During her stay, she earned the name the "Sunshine Girl" for her positive attitude. Her story gained attention across the state, and newspapers such as the *Clarion Ledger*, *Jackson Daily News*, and *Commercial Appeal* repeatedly published stories about Watts. The *Clarion Ledger* explained upon Watts's departure, "There's a thrill and a throb in that story [Watts's] even for

²⁷⁴ Ibid., 157.

²⁷⁵ Ibid.

²⁷⁶ Ibid., 158.

strangers—Newspaper readers who never heard of Miss Polly Watts and who will never see her.”²⁷⁷ The public, then, was fascinated with Watts’s experience, and they knew about her constructive hospitalization in the Mississippi Sanatorium with the friendly nurses. The staff expressed pleasure in seeing her disease arrested, but felt saddened at the loss of such an upbeat patient. In her own words, Watts said she fought TB because, “They [the staff] was so good to me, and I wanted to pay them in some way for what they had done for me.”²⁷⁸ Watts, despite the severity of the treatment and illness, remembered fondly the nurses, doctors, and the institution itself.

Nearly two decades earlier in 1923, Fred Odom went to work at the Mississippi State Sanatorium and quickly advanced to chief electrician for the institution. Odom worked his entire adult life at the Sanatorium, and, despite an offer to make \$200 more at another job, he stayed because of “all the advantages” the Sanatorium offered.²⁷⁹ When asked what made him love the Sanatorium, Odom answered, “the employees and the patients were about the finest group of people you would ever find in one place. Everyone here was just like my own people—my own family.”²⁸⁰ Odom’s bond to the Sanatorium kept him from leaving work there, even during economically difficult times, and his memories recount a web of caring relationships that did not weaken over time.

Similarly in 1938, Anice and H.B. Terry came to work at the Sanatorium. Anice found a job as a secretary to Dr. Walker while her husband, H.B., found a position as head of the x-ray department. The couple continued working there until they retired in 1974, earning them the status of the longest working husband and wife team. Anice recalled Dr. Boswell saying he “had

²⁷⁷ Ibid., 159.

²⁷⁸ Ibid., 162.

²⁷⁹ Ibid., 170.

²⁸⁰ Ibid., 171.

a soft spot in his heart for every patient and employee, and each employee and patient had the utmost respect for him.”²⁸¹ Overall, Anice believed her work at the Sanatorium “were wonderful years. We made many friends while there both among employees and patients. We shall always cherish these friendships.”²⁸² The Terrys’ long work history and friendships, again, encourage a positive perspective of the Sanatorium that continued after they left. These patients recounted their experiences to family, friends, and neighbors, and the praise facilitated the growth of public support for the institution during and after the Surgical Age.

Newspaper articles perhaps offer a better estimate of public opinion than former patient and employee testimonials. Generally trusted as a reliable source by the public, a newspaper offered the ability for writers to influence the readers and shape their perspective on topics chosen. Newspapers also had a better circulation, and more Mississippians probably read the “unbiased” accounts of the Mississippi State Sanatorium than heard the stories from ex-patients and ex-employees. Overall, newspapers promoted the Sanatorium and its surgical facilities as the best in the nation.

The newspaper, *The Thermometer*, had a circulation of a couple of thousand throughout the state in addition to its readers within the Sanatorium. One article in *The Thermometer* claimed, “Mississippi maintains the finest tuberculosis sanatorium in the South and one of the finest in the world. Here the incipient cases of TB are taken and given the latest scientific treatment.”²⁸³ Although written in 1926, the facility had already gained a reputation so high as to be regarded by some of the medical community as one of the best sanatoria in the world. To keep the title, the sanatorium kept up with medical trends, such as surgery. In the following

²⁸¹ Ibid., 173.

²⁸² Ibid.

²⁸³ *The Thermometer*, August 1926. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

year, another article in *The Thermometer* stated, “as a financial investment, because of lives saved and valuable citizens returned to active pursuit of professions, and as a humanitarian enterprise, the Sanatorium proved so successful.”²⁸⁴ In this excerpt, the writer argued that the state funds gained from taxes were, in the end, worth the cost to the citizens. In the same issue, the reputation of the Sanatorium was discussed saying, “The fame of the institution had spread all over the United States.”²⁸⁵ The Sanatorium had seemingly earned a name as an effective and modern facility.

In 1930, *The Thermometer* again called the Sanatorium “one of the most modern institutions of its kind anywhere.”²⁸⁶ The Sanatorium continually updated itself to keep abreast of new innovations to keep the status as one of the best sanatoria in the world. In one of the last issues of 1932, *The Thermometer* asserted that it served as a necessity to the public in more than just providing cures. By having the infected stay in the Sanatorium, “isolation in a tuberculosis sanatorium is a great help. The [Mississippi] Sanatorium...is also and more especially for the protection of the well public.”²⁸⁷ Through the years, *The Thermometer* continually presented the Sanatorium as modern, effective, and renowned for its work against tuberculosis. The newspaper, however, displays a shift in argument—from how effective and modern the facility was to the economic and personal advantage of having those with TB confined within the Sanatorium. The articles recognized a need for public approval, and the Sanatorium was consequently described as a benefit to both the ill and the rest of society.

²⁸⁴ *The Thermometer*, August 1927. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

²⁸⁵ Ibid.

²⁸⁶ *The Thermometer*, June 1930. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

²⁸⁷ *The Thermometer*, June 1932. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

Although *The Thermometer* had a readership of a couple thousand throughout the state, other local newspapers possessed a higher circulation. The *Magnolia Gazette*, Jackson's *Daily News*, the *Commercial Appeal*, and the Jackson *Daily Clarion-Ledger* all covered the Sanatorium in a positive light. In January of 1925, the *Daily Clarion-Ledger* bragged, "the tubercular sanatorium is doing wonderful work but needs more funds. Within the space of a few years, the institution has been established and rapidly extended despite inadequate finances and overwhelming obstacles."²⁸⁸ Hale contended the Mississippi State Sanatorium was not only a necessary facility for Mississippians but also an institution that deserved more state funds. The article aimed at influencing debates in the legislature over additional appropriations as well as stimulating public support for the Sanatorium.

In this respect, Hale's article was not unique. For example, in 1924, local newspapers covered a debate between Dr. Henry Boswell and politicians over a salary issue. Boswell refused to take any more pay cuts and resigned in protest. The *Magnolia Gazette* praised Boswell saying, "[he] has saved more human lives in Mississippi during the past decade than all members of his profession combined."²⁸⁹ Instead of painting Boswell as a greedy doctor, the newspaper wrote favorably about the superintendent of the Sanatorium and focused on his effective method of treatment. The *Daily Clarion-Ledger* and the Jackson *Daily News* covered the issue with articles titled "The State Must Have Dr. Henry Boswell" and "Sanatorium Patients Deplore Resignation," "The State Loses," "Fighting to Retain the Services of Dr. Boswell," and "Cheap Men Higher Up."²⁹⁰ The Jackson based newspapers believed Boswell was an asset to

²⁸⁸ F.L. Hale, *Daily Clarion-Ledger*, January 1925. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

²⁸⁹ Joe Norwood, "Back on the Job," *Daily Clarion-Ledger*, 1924. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

²⁹⁰ *Daily Clarion-Ledger* and Jackson *Daily News*, 1924. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

the state of Mississippi, and they criticized higher-ranking political officials for not spending the necessary money to retain him. The newspapers printed letters from patients and other doctors protesting the state's decision not to cut Boswell's salary, and clearly, the papers held a bias in favor of the Sanatorium and Boswell. Again, arguments for the Sanatorium discussed financial trade-offs. The benefit from the Sanatorium merited the expenses it cost both the people of Mississippi and the state.

Despite being based in Memphis, the *Commercial Appeal* also printed stories on the Sanatorium. In 1925, the Memphis newspaper called Boswell "not only splendid, he is doing a splendid work. He is doing the noblest kind of work. He is driving from Mississippi the greatest of all plagues."²⁹¹ The reporter requested Mississippians to support Boswell because "if the people of Mississippi will continue to stand behind him; if the legislatures of the future will continue their generous appropriations, this man will rid the grand old Magnolia state of its greatest menace."²⁹² Moreland repeated the word "continue," which suggests that the people and politicians did back the Sanatorium already in 1925. He also recognized the integral tie among medicine, the public, and government. With all three working towards a common goal, tuberculosis would no longer pose a threat to Mississippi.

The institution's emphasis on surgery also made its way into the papers. In 1937, the *Daily Clarion-Ledger* wrote an article titled "Public Health Sentiment in Remarkable Growth." The article focused on the Mississippi State Board of Health and the "developing social consciousness" in the fight against diseases, including tuberculosis.²⁹³ Tuberculosis, the article claimed, had decreased 28%. Tuberculin tests and x-rays allowed the disease to be caught early,

²⁹¹ George Moreland, "Rambling in Mississippi," *The Commercial Appeal*, February 22, 1925. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

²⁹² Ibid.

²⁹³ "Public Health Sentiment in Remarkable Growth," *Daily Clarion-Ledger*, December 31, 1937: 6.

which meant a cure was more likely. The exemplary work of the Board of Health made it “a model by states and nations with similar climatic conditions all over the world,” and as a result, “fifty-five visitors have come from sixteen states and eight foreign countries...to study the scheme of health promotion.”²⁹⁴ The Sanatorium had many of the health officials from other areas visit to see the most modern techniques of surgical collapse therapy. Through its coverage, the *Daily Clarion-Ledger* offered a positive view of public health in Mississippi, including the Sanatorium and its shift to surgical treatment, and the article encouraged pride in the Board of Health’s work.

In newspapers, advertisements attempt to make products desirable to people, but in doing so, advertisements appeal to what the public already thinks or believes. By looking at the ads from 1918 to 1937, a shift is portrayed in the public’s perception about science. In 1918, the *Daily Clarion-Ledger* consistently carried advertisements for goods best described as quackery. Appearing as articles, one ad promoted the drug C-2223 for eczema claiming it was “a liquid medicine which purifies and strengthens your blood...[and also] drains out of your system all the poisons, humors, and uric acids that cause the awful pains and sores.”²⁹⁵ The same drug appeared almost daily for a few years in the *Daily Clarion-Ledger*. The manufacturer and advertisers tried to make the drug seem scientific by giving it a formula-like name, C-2223. Yet, the drug appealed to the older humoral view of medicine with its claim to fix the imbalance of “humors” and other toxins in the body. Humoral pathology still lingered in 1918, and companies sold prescriptions that worked in that capacity. On July 17, 1918, advertisements for Cuticura, Dodson’s Liver Tone, Calotabs Calomel, and Castoria claimed to relieve eczema, skin disorders,

²⁹⁴ Ibid.

²⁹⁵ *Daily Clarion-Ledger*, July 16, 1918: 6.

allergic rashes, and poor digestion, respectively.²⁹⁶ On February 8, 1918, another product called Grove's Tasteless Chill Tonic guaranteed to "fortify the system against winter cold...it purifies and enriches the blood and builds up the whole system thus fortifying the system against colds and the grip."²⁹⁷ Again, the advertisement based its cure upon humoral pathology. Although the Pure Food and Drug Act of 1919 did away with most quackery, some still lingered in the 1920s.

By 1937, however, advertisements appealed to the readers through technology and "modern" medicine. One ad for a chiropractic clinic defined what a chiropractic clinic was and used medical jargon to impress the public. It started with logic arguing, "If a person is ill, then the condition of disease...is in fact an effect for which there must be a cause."²⁹⁸ Chiropractors have long fought for inclusion in mainstream medicine, and in 1937, the physicians who practiced such form of medicine met with mixed reception from others in the medical community. The advertisement next gave the purpose of the clinic stating, "The chiropractic objective is to locate the point in the spine where nerve pressure exists due to vertebral subluxation (misplacement) and...restore the subluxated vertebra to its normal position, thus releasing the pressure on the nerves involved and thereby removing the cause of disease in the body."²⁹⁹ The Jackson practice did not assume the reader to understand the medical terms since the advertisement did explain the definition for "subluxation," but it did take for granted that the reader would know the term "vertebra" and be impressed by the idea of modern surgical facilities. When compared to the 1916 ads, medical products portrayed a shift in popular thought. People apparently preferred medical goods to be based on cutting-edge science, including surgery, and the public seems to have placed increased faith in the medical profession

²⁹⁶ *Daily Clarion-Ledger*, July 17, 1918: 3-4.

²⁹⁷ *Daily Clarion-Ledger*, February 8, 1918: 3.

²⁹⁸ *Daily Clarion-Ledger*, December 31, 1937: 2.

²⁹⁹ *Ibid.*

as a whole. Trusting in the professional authority of doctors, the public generally deferred to medical advice.

Although newspapers offered a large amount of publicity, some groups continued behind the scene to support surgery, especially in the Mississippi State Sanatorium. Throughout the life of the Sanatorium, the women's clubs in Mississippi continued to provide aid and support. In the Mississippi Federation of Women's Clubs' magazine, *Woman's Magazine*, women bragged about the work at the Sanatorium and its usefulness. The magazine circulated throughout the state and, consequently, influenced a sizeable group of women in the state of Mississippi. As discussed in Chapter 3, the Mississippi Federation of Women's Clubs and other women's clubs, such as the Daughters of the American Revolution, provided agitation and support for the creation of the Mississippi State Sanatorium. Their support did not end with the opening of the Sanatorium but rather continued throughout its life span.

In 1927, the Mississippi Federation of Women's Clubs petitioned the legislature to allocate funds for the Mississippi State Sanatorium.³⁰⁰ Much of the 1928 appropriations helped with the creation of new buildings and the enlargement of other facilities in the institution. Also during the same time, the Women's Clubs led a Dollar Book Campaign and donated the proceeds of \$3,500 to increase the collection of the Sanatorium's library.³⁰¹ In the June 1930 issue of *Woman's Magazine*, the Mississippi Federation of Women's Clubs listed its accomplishments and included "support state and local health officers in legislation work" as one of its successes.³⁰² The Women's Clubs held increased political influence during the Great

³⁰⁰ *The Thermometer*, August 1927. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

³⁰¹ *The Thermometer*, June 1932. Box 2, Series Z/12800.000: Boswell (Henry) Collection. Mississippi State Archives, Jackson, Mississippi.

³⁰² Mississippi Federation of Women's Clubs, *Mississippi Woman's Magazine*, June 1930, Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

Depression. In the list of members for the 1930s, the governors' wives each participated in the Women's Clubs and occasionally contributed a piece to the magazine. The December 1931 issue contained an article by the newly elected Governor Mike Conner. Conner knew his administration would face economic hardships, especially as he attempted to remedy the corruption from Bilbo's prior term. Conner petitioned the readers of *Woman's Magazine* saying, "I covet a full measure of co-operation from every citizen of the state and especially the large group of patriotic women included in the membership of the federation of women's clubs."³⁰³ As Senator Joseph Randall had acknowledged when creating the NIH, state federated clubs and the DAR had long been active in politics, and politicians needed the support from these female groups. Also throughout the Great Depression, the Women's Clubs supported Christmas Seal campaigns. They sold stamps and published the Christmas Seal story to advertise the seasonal campaign. The revenue from those campaigns went to the Mississippi Tuberculosis Association and the Mississippi State Sanatorium to continue the fight against tuberculosis.³⁰⁴ During the 1930s, the Mississippi Federation of Women's Clubs felt the pinch of the economic depression. They had consistently published twenty-eight to thirty page magazines, but the 1930-1940 issues barely reached eight to twelve pages. Still, the Women's Clubs prioritized the Sanatorium and public health.

Public support did not arise simply from simple altruism, although that, no doubt, contributed to Mississippians' interest in the Sanatorium. The Sanatorium worked to make itself indispensable to the local citizens and eventually to many people throughout the state. Public health seeks to take care of the community, and even though the Sanatorium existed as an arm of

³⁰³ Mississippi Federation of Women's Clubs, *Mississippi Woman's Magazine*, December 1931, Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

³⁰⁴ Mississippi Federation of Women's Clubs, *Mississippi Woman's Magazine*, October 1932, Z/1281.000 McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.

the Board of Health, it was established initially “for the prevention and treatment of tuberculosis.”³⁰⁵ Changes in perceptions about the efficacy of sanatoria forced changes in the direction of the Mississippi State Sanatorium. Adopting surgical methods for treatment was one means. Catering to the public by providing services, some not related to tuberculosis in the least, was another way.

For example, beginning in 1930, the Sanatorium maintained a small movie theater.³⁰⁶ Patients attended the shows, but local residents also were invited to come to the Sanatorium to see the movies. The golf course and tennis courts were also made available for public use.³⁰⁷ Patients infrequently earned privileges to play golf or especially something as strenuous as tennis, and although employees and their children could use the recreational facilities, the local population enjoyed the services more often. The religious services held in the Sanatorium were also open to the public, and many people from Magee did participate in them. Local residents enjoyed the services that the Sanatorium made available to them, and this likely offered a further incentive for public support.

In 1937, the Sanatorium strengthened its connection to the outside communities by developing travelling clinics. Employees conducted travelling clinics in the surrounding areas, and x-rays were taken of the people who attended in an attempt to diagnose pulmonary tuberculosis.³⁰⁸ X-ray technology had progressed to allow clearer images for better diagnoses, and even the general public expressed interest in the development. The *Daily Clarion-Ledger* stated that an exhibition for the public “drew new interest” in medical advancements for

³⁰⁵ Butler, 14.

³⁰⁶ Ibid., 78-79.

³⁰⁷ Ibid., 79.

³⁰⁸ Calder, 294.

tuberculosis.³⁰⁹ Many flocked to the travelling clinics to have an x-ray. Some came to marvel at the equipment and resulting picture of their lungs, and some came to find out whether or not they had TB. The clinics operated out of the Sanatorium until 1945, and each year they conducted several thousand x-rays as the workers went from county to county.³¹⁰ Much of the money to conduct the field units came from Christmas Seal funds and county tuberculosis associations. The clinics sought to increase early detection with the free x-rays and to educate the local citizens about pulmonary tuberculosis. The travelling clinics also went into schools to diagnose children, and again, Mississippians were indebted to the Sanatorium for its aid.

In 1938, the Sanatorium continued to seek approval from the community by connecting nearby towns to the Sanatorium's sewage treatment plant.³¹¹ WPA grants for the Sanatorium also went to create new water lines and sanitation toilets for local citizens. As with the sewage plant, the Sanatorium housed and ran the water plant. The Sanatorium also improved the telephone and power lines in and around the large facility.³¹² Those who lived nearby in Magee then depended on the institution for clean water and sewage facilities. The Sanatorium furthermore sought to become nearly self-sufficient in order to avoid dependence on the local towns. The Sanatorium ran a farm that provided much of the needed goods for feeding the patients and its employees. Poultry, milk, vegetables, and hogs were raised for people in the facilities, but butter and a few other goods still had to be purchased from Magee stores.³¹³ In good harvest years, the surplus food produced on the Mississippi State Sanatorium farm was sold

³⁰⁹ "Great Epidemics Ended by State Board of Health," *Daily Clarion-Ledger*, December 31, 1937: 5.

³¹⁰ Underwood, *Medical Licensure 1938-1947*, 42.

³¹¹ Mississippi State Sanatorium, 88.

³¹² Uniform Annual Report, June 30, 1937-June 30, 1938. Series 2033: Tuberculosis Sanatorium Audits, Mississippi State Sanatorium, Jackson, Mississippi.

³¹³ Henry Boswell, M.D., *Biennial Report of the Bureau of Tuberculosis and Tuberculosis Sanatorium*, July 1, 1927-June 30, 1929 (Jackson, Mississippi: Mississippi Board of Health): 11.

in the local market.³¹⁴ Selling the excess goods not only provided additional income but also further connected the local towns to the Sanatorium.

Overall, the Sanatorium continued its goal to eradicate TB, but it also pandered to the local community for support with the travelling clinics. Also, by offering free services to the nearby citizens, the Sanatorium desired not only to help the people but also to prove how the Sanatorium was vital to public health. Financial hardships further jeopardized the institution, and by making Mississippians dependent on the facility for some resources and shifting its treatment to collapse therapy, the Sanatorium earned positive feedback from the community. The institution appealed to the public's self-interest and interest in medical advancements, such as x-rays and surgery. The Mississippi State Sanatorium by the late 1930s succeeded in making itself indispensable to the citizens of Mississippi.

³¹⁴ Butler, 71.

CHAPTER 8

CONCLUSION: THE RECENT CHAPTER IN TREATMENT FOR PULMONARY TUBERCULOSIS AND REVISION OF THE SURGICAL AGE

In 1943, Selman Waksman revolutionized the treatment of tuberculosis when a graduate student in his laboratory developed the antibiotic streptomycin. Never before had a drug proven effective against tuberculosis. Within a few years, however, the toxic side effects of streptomycin threw its efficacy into question. It could cure the disease, but at what cost to the patient? Moreover, drug resistant strands of tuberculosis emerged quickly. By 1949, para-aminosalicylic acid (PAS) was developed, and it mitigated some of the side effects while increasing the efficacy of streptomycin when used in combination with it.³¹⁵ After 1950, more antitubercular drugs, such as isoniazid (INAH) and rifampicin, became available to cure people suffering from TB. Unlike the rest cure and collapse therapy, antibiotics actually eliminated the tubercle bacillus rather than sending the disease into remission. INAH's tests received a lot of attention from the media. As doctors discovered growing drug resistant strains, the combinations of drugs— especially the chemotherapeutic blend of streptomycin, PAS, and INAH— proved effective.³¹⁶ Consequently, the 1940s and 1950s are considered the antibiotic revolution. Tuberculosis could be cured rather than arrested, and the eradication of TB was finally possible with a drug instead of rest therapy, climate, diet, or even surgery.

For the next three decades, antibiotics were required to be administered within sanatoria. Nevertheless, few sanatoria survived until the sixties. By the 1970s, many Americans wrongly believed tuberculosis was no longer a threat and had been eliminated from the continent. In the

³¹⁵ Feldberg, 193-194.

³¹⁶ Thomas Dormandy, *The White Death: A History of Tuberculosis* (New York: New York University Press, 1999): 368. Dormandy contends that INAH— and not streptomycin as other historians have claimed—brought a “historic advance” since INAH was less expensive and less toxic than both streptomycin and PAS.

growing reliance on antibiotics, some sanatoria continued to linger, as did surgery. Collapse therapy procedures waned by the late 1950s even though some surgeons still conducted artificial pneumothorax operations and thoracoplasties. Briefly during the fifties, however, surgeons frequently used another form of collapse therapy called pneumoperitoneum operations. In these procedures, air was introduced into the abdominal cavity instead of the pleural cavity (as in a pneumothorax), and the lung collapsed from the pressure exerted. Like a pneumothorax, refills were required as the air absorbed into the body.

Resections, however, ended up replacing collapse therapy. Resections focused on removing diseased tissue or parts of the organ from the body and included operations such as lobectomies (removal of an entire lobe of the lung) and pneumonectomies (removal of a portion of the lung). Surgeons spoke of the antibiotic revolution in its usefulness to resection therapy rather than using antibiotics independently to treat TB. One article in *California Medicine* stated that by “1948, the antibacterial drugs effective against tuberculosis were available and had so reduced the hazards of excisional operation.”³¹⁷

Although there was a rapid increase in the use of this surgical therapeutic measure, operations continued well into the 1950s. Collapse therapy faded into the background. In the Mississippi State Sanatorium, pneumothorax procedures (both the initial operation and refills) totaled 8 for the month of April 1954 while pneumoperitoneum (both the initial operation and its refills) totaled 157.³¹⁸ Resections also became more common at the Sanatorium, comprising three of the thirty other operations during the same month.³¹⁹ These statistics correspond with a national study published in *California Medicine*. Three doctors from Los Angeles, California,

³¹⁷ John Jones, M.D., Joseph Robinson, M.D., and B.W. Meyer, M.D., “The Changing Picture of Surgery in Pulmonary Tuberculosis,” *California Medicine*, vol. 81, no. 4. (October 1954): 261.

³¹⁸ Mississippi State Sanatorium, Thoracic Surgery Records, April 1954, Box 9725, Series 2089: Operation Records. Mississippi State Archives, Jackson, Mississippi.

³¹⁹ Ibid.

reported zero resections and 89 collapse procedures for 1943. By 1953, they found 80 resections and only 14 collapse operations.³²⁰

Another study analyzed the effectiveness of resections in 1965 through one hundred cases. Of 82 individuals who survived, 94% were considered “free” from TB.³²¹ 90% had found employment again, and of the women, 33% had children and no relapse at the end of ten years. The journal quoted a prior American study that believed ““the prognosis of the tuberculosis pregnant woman is little affected by pregnancy provided that adequate care is given during and following her pregnancy.””³²² Doctors, then, continued to agree with 1930s findings that pregnant women did not need therapeutic abortions and could give birth without strain on their bodies. Surgery, although in a different form, still existed in the treatment of pulmonary tuberculosis by the late 1950s.

Even with new developments in medicine, older methods continued to linger. Medical history in general supports such a claim, and the history of tuberculosis, despite its slower “progress,” also proves the shift from one method of treatment to another is not clearly rigid but rather more subtle than often assumed. Doctors and patients did not abandon older remedies immediately; they placed emphasis on newer techniques while slowly letting go of previous methods. In the Surgical Age of pulmonary tuberculosis, surgery dominated political agendas, doctors’ preferences, and the general public’s interests, although the rest cure still was offered. Physicians did not actually abandon the rest cure completely until the 1960s. Since surgery and even rest therapy continued into the Age of Antibiotics for the treatment of pulmonary

³²⁰ Jones, 261.

³²¹ R.F. Lane, M.D. and W.E. Harrison, M.D., “A Five to Ten Year Survey of Pulmonary Resection for Tuberculosis,” *Canadian Medical Association Journal*, vol. 76 (May 15, 1957): 846.

³²² Ibid.

tuberculosis, the use of the rest cure during the Surgical Age does not detract from the need for recognizing the Surgical Age as a distinctive era in the history of TB and American medicine.

Moreover, the setting for most of the Surgical Age does not diminish its importance either. Collapse therapy, although conducted initially within sanatoria, branched out into regular hospitals. Surgery thus existed beyond the Sanatorium, although the institution continued to be the primary treatment site. Even with the beginning of the Antibiotic Age, antibiotics continued to be administered in sanatoria as well as in hospitals. If the Antibiotic Revolution initiated a new era in the treatment of pulmonary tuberculosis, yet still employed older methods inside of the sanatorium, then the use of the rest cure and the setting of the sanatorium should not negate the uniqueness of the Surgical Age.

But other obstacles also have delayed recognition of the Surgical Age. Although many people place faith in science and present medical developments as a clear linear progression for the good of all, specializations are not always given prestige and trust. For years, surgeons fought for both professional authority and more business. Immediately following the Surgical Age, one survey by Robert Block and W. B. Tucker searched through 2,100 papers on pneumothorax published between 1929 and 1939. They claimed that only 1/20 of the papers actually assessed the results of the surgery and the impact upon the patient.³²³ This led many to question the intention of the surgeon. One doctor stated, ““The pneumothorax needle was the most dangerous weapon placed into the hands of the physician.””³²⁴ Cartoonists even depicted surgeons as greedy and exploitative of the patient.³²⁵

³²³ Caldwell, 256.

³²⁴ Ibid., 257.

³²⁵ Rudolph Matas, *The Soul of the Surgeon*, (New Orleans: Board of Managers of Touro Infirmary, 1955): 12.

Within the medical profession, surgeons themselves have criticized the “surgical wolf.”³²⁶ Some surgeons purposefully coaxed patients into surgery in order to increase the amount charged for services. Quite a few surgeons even offered kickbacks to physicians for referring patients supposedly in need of surgery. Those in the profession acknowledged, “[the] question of quackery and dishonesty have distorted the vision of the honest and conscientious surgeon in the public eye... no doubt why the public still entertains some erroneous notions as to his character and ideals.”³²⁷ To combat the poor public image, the American College of Surgeons organized in 1913 to regulate members and revoke licensure if necessary. Dr. Rudolph Matas, a well-known surgeon of the time, also warned other surgeons, “insensibility or callousness is no longer a ‘necessary virtue’ in the surgeon of today.”³²⁸

Yet even with these professional attempts to overcome the image of surgeons as bloody butchers, many historians continue to paint that picture. In *The White Death*, Daniel Dormandy stated the pneumothorax operations typically was performed “often by incompetent operators, in tens of thousands of unsuitable cases; and the results were perfectly dismal.”³²⁹ Likewise, in *The Last Crusade*, Mark Caldwell describes surgeons as “vying for efficiency and renown.”³³⁰ He includes an excerpt from a patient, Betty MacDonald, who “recalled her first experience with the procedure: ‘The nurse put one jar higher than the other and I waited frantically for my breathing to stop and suffocation to start...[when he took the needle out] I got down from the table, dizzy with relief.’”³³¹ In Caldwell’s view, the surgeons ruthlessly operated on a woman with rudimentary “two gallon fruit jars,” “a steel knitting needle,” and “a small rubber hose” to

³²⁶ Ibid., 15.

³²⁷ Ibid., 23.

³²⁸ Ibid., 30.

³²⁹ Dormandy, 352.

³³⁰ Caldwell, 254.

³³¹ Ibid., 253.

perform a pneumothorax.³³² The barbaric and inhumane procedure, according to Caldwell, served the surgeon and not the patient. In *Fevered Lives*, Katherine Ott acknowledges a period of surgical treatment during the first half of the twentieth century, but surgeons, she contests, were not exempt since “the passion for instruments....found its fullest expression in a furor for surgery.”³³³ Rather than the growth of surgery being born from purely humanistic desires or sanatoria’s search for purpose, Ott states surgery rose from market forces and the surgeon’s specialization and desire for prestige and authority.³³⁴ In *The White Plague*, Rene and Jean Dubos do not criticize surgeons as harshly, but they speak of collapse therapy with the advantage of knowing the outcome of the procedures. In writing about a thoracoplasty, the authors stated, “This hope is not always fulfilled and there often occur in the collapsed lung profound changes which destroy irreversibly its respiratory functions.”³³⁵ Overwhelmingly, collapse therapy and surgeons of the early twentieth century have been described in a negative light.

In hindsight, we can see that surgery did not produce the most favorable results in treating tuberculosis, but the fact is, surgeons and physicians at the time thought that it did. Politicians promoted it to their constituents. And the public, in turn, demanded it. As the historian Elizabeth Reis aptly states, “Medical practice cannot be understood apart from the broader culture from which it is embedded....Doctors have been and continue to be influenced by the values and anxieties of the larger society, which render any medical management a cultural, rather than simply scientific endeavor.”³³⁶ In the Surgical Age, politics, medicine, and public opinion mixed with serious repercussions for patients seeking treatment for a debilitating

³³² Ibid.

³³³ Ott, 94.

³³⁴ Ibid.

³³⁵ Dubos, 259.

³³⁶ Elizabeth Reis, *Bodies in Doubt: An American History of Intersex*, (Baltimore: Johns Hopkins University Press, 2009): x.

and life-threatening disease. For two decades, collapse therapy dominated the pioneering techniques for pulmonary tuberculosis treatment. Scientists and historians cannot quickly dismiss a therapy promoted and adopted by the medical profession, politicians, and the public simply because it did not work. Such revisionism creates a linear progression of science and a myth of continual advancement. To correct the historical narrative and to do justice to the patients who suffered through it, the Surgical Age needs to be recognized as a separate era that rose out of the sanatorium's search for legitimacy during the Great Depression. As this thesis shows, this legitimacy was contingent upon the ongoing support of the public, politicians, physicians, and patients.

BIBLIOGRAPHY

Primary Sources

Books

- Alexander, John. *The Collapse Therapy of Pulmonary Tuberculosis*. Chicago: Charles C. Thomas, 1937.
- Bunyan, John. *The Life and Death of Mr. Badman: Presented to the World in a Familiar Dialogue between Mr. Wiseman and Mr. Attentive*. London: Nathan Ponder, 1680.
- Calder, Marvin. *Mississippi State Sanatorium: Tuberculosis Hospital, 1916-1976*. Florence, Mississippi: The Messenger Press, 1986.
- Committee on the Prevention of Tuberculosis of the Charity Organization Society of the City of New York. *A Handbook of the Prevention of Tuberculosis*. New York: The Charity Organization Society, 1903.
- Jacobs, Philip. *The Control of Tuberculosis in the United States*. New York: National Tuberculosis Association, 1932.
- Matas, Rudolph. *The Soul of the Surgeon*. New Orleans: Board of Managers of Touro Infirmary, 1955.
- Medler, William. *Pages Written in a Hospital*. New York, American Press Publications, 1963.
- Ray, Richard. *Saranac, 1937-1940: A Memoir*. New York, Historic Saranac Lake, 2005.

Periodicals/Articles

- Berry, Frank, M.D. "The Unfavorable Results of Phrenicectomy." *Archives of Surgery* 21, no. 6 (1930): 1125-1133.
- _____. "Massive Atelectasis Complicating Paravertebral Thoracoplasty for Pulmonary Tuberculosis." *Archives of Surgery* 18, no. 1 (1929): 257-270.
- Boswell, Henry, M.D. *Biennial Report of the Bureau of Tuberculosis and the Tuberculosis Sanatorium, July 1, 1925 to June 30, 1927*. Jackson, Mississippi: Mississippi Board of Health, 1927.
- _____. *Biennial Report of the Bureau of Tuberculosis and Tuberculosis Sanatorium, July 1, 1927-June 30, 1929*. Jackson, Mississippi: Mississippi Board of Health, 1929.

- Brown, A., M.D. and Stanley R. Truman, M.A. "Surgery in the Treatment of Pulmonary Tuberculosis." *California and Western Medicine* 40, no. 1 (January 1934): 25-33.
- Carter, B.N., M.D. "Thoracoplasty as a Method of Treatment in Pulmonary Tuberculosis." *Archives of Surgery* 22, no. 2 (1931): 289-306.
- Cole, Dean, M.D. and Frank S. Johns, M.D. "Therapeutic Pulmonary Collapse." *Archives of Surgery* 19, no. 6 (1929): 1193-1204.
- Davies, H., M.D. "The Surgery of Pulmonary Tuberculosis." *Post-Graduate Medical Journal* (January 1935): 17-25.
- Frank, L., M.D. and Paul Turner, M.D. "Thoracoplasty in the Treatment of Pulmonary Tuberculosis." *Annals Of Surgery* 107, no. 5 (May 1938): 745-752.
- Gallup, George. *The Gallup Poll: Public Opinion, 1935-1942*. New York: Random House, 1986.
- Howson, Carl, M.D. "Tuberculosis Cavities: Their Significance, Prognosis, and Treatment." *California and Western Medicine* 39, no. 5 (November 1933): 302-306.
- Jones, John, M.D., Joseph Robinson, M.D., and B.W. Meyer, M.D. "The Changing Picture of Surgery in Pulmonary Tuberculosis." *California Medicine*, vol. 81, no. 4. (October 1954): 259-262.
- Kennedy, J. "The U.S. Senate Takes a Step in Scientific Medicine." *Medical Journal and Record: A National Review of Medicine and Surgery*, vol. cxxxiv, no. 6, September 16, 1931.
- Lane, R., M.D. and W.E. Harrison, M.D. "A Five to Ten Year Survey of Pulmonary Resection for Tuberculosis." *Canadian Medical Association Journal*, vol. 76 (May 15, 1957): 845-846.
- Matson, Ralph, M.D. "The Electrosurgical Method of Closed Intrapleural Pneumolysis in Artificial Pneumothorax." *Archives of Surgery* 19, no. 6 (June 1929): 1175-1192.
- Mississippi State Board of Health. *Annual Report of the State Board of Health of the State of Mississippi, 1915-1917*. Jackson, Mississippi: State of Mississippi, 1917.
- Mississippi State Board of Health. *Mississippi State Board of Health Report 1939-1941*. Jackson: State of Mississippi, 1941.
- Nevius, John, M.D. "Bedside Medicine for Bedside Doctors." *California and Western Medicine* 37, no. 5 (November 1932): 319-321.

Potter, B., M.D. "Bilateral Collapse Therapy in the Treatment of Pulmonary Tuberculosis." *Archives in Surgery* 37, no. 1 (1938): 132-138.

Rhodes, Frederick, M.D. "Advances in Tuberculosis Work." *Journal of the National Medical Association* 30, no. 1 (February 1938): 9-15.

Rienhoff, William, M.D. "The Surgical Technic of Total Pheumonectomy." *Archives of Surgery* 42, no. 2 (1936): 218-231.

Robinson, Samuel, M.D. "The Present and Future in Thoracic Surgery." *Archives of Surgery* 6, no. 1 (1923): 247-255.

Singer, J., M.D. "Collapse Therapy in Pulmonary Tuberculosis." *California and Western Medicine* 45, no. 2 (August 1936): 120-125.

Yates, J., M.D. "Pulmonary Tuberculosis Pathology and Treatment." *Archives of Surgery* 19, no. 6 (1929): 1122-1160.

_____. "Rationale of Operations Helpful in Promoting Recovery from Pulmonary TB." *Archives in Surgery* 14, no. 1 (1927): 369-393.

Newspapers

State Times

The Daily Clarion-Ledger

The Commercial Appeal

Jackson Daily News

Legislative Records

Mississippi State Legislature. "Presentation of Petitions." *Senate Journal*: 1916.

Mississippi State Legislature. "Governor's Messages." *House Journal*: 1917.

Mississippi State Legislature. "HB620." *House Journal*: 1934.

Manuscript and Archival Collections

Conner, Sennett. *Special Message of Governor Sennett Conner to Mississippi Legislature on the Subject of Relief and Work Relief and Civil Works Administration, January 10, 1934*. 353.9762/M69gcs, Mississippi State Archives, Jackson, Mississippi.

- Daughters of the American Revolution, *Baton Rouge Chapter Records, 1921-1990*. Louisiana State University, Baton Rouge, Louisiana.
- Series 1700: Tuberculosis Sanatorium Correspondence. Mississippi State Archives, Jackson, Mississippi.
- Series 2028: Office Files of Felix J. Underwood, M.D., 1922-1959. Mississippi State Archives, Jackson, Mississippi.
- Series 2033: Tuberculosis Sanatorium Audits. Mississippi State Archives, Jackson, Mississippi.
- Series 2089: Operation Records. Mississippi State Archives, Jackson, Mississippi.
- Series 2131: Mississippi Board of Health Staff Conference Minutes, 1940. Mississippi State Archives, Jackson, Mississippi.
- Series E:117: The Joseph Ransdell Papers. Louisiana State University, Baton Rouge, Louisiana.
- Series M114: The Papers of Kate Brown. University of Southern Mississippi, Hattiesburg, Mississippi.
- Series M2: The Theodore G. Bilbo Papers. University of Southern Mississippi, Hattiesburg, Mississippi.
- Series M423: Butler, Marie Gertrude, *Recollections of the Sanatorium*. University of Southern Mississippi, Hattiesburg, Mississippi.
- Trout, Hugh. *An Appraisal of the Surgical Treatment of Pulmonary Tuberculosis*. Roanoke, Virginia: Southern Surgical Association, 1931. Louisiana State University, Baton Rouge, Louisiana.
- Z/1281.000: McLemore (Richard Aubrey) Papers. Mississippi State Archives, Jackson, Mississippi.
- Z/1280.000 S: The Boswell (Henry) Collection, 1926-1958. Mississippi State Archives, Jackson, Mississippi.

Secondary Sources

Books

- Baldwin, Peter. *Contagion and the State of Europe, 1830-1930*. New York: Cambridge University Press, 2005.

- Bates, Barbara. *Bargaining for Life: A Social History of Tuberculosis, 1876-1938*. Philadelphia, University of Pennsylvania Press, 1992.
- Bond, Bradley. *Mississippi: A Documentary History*. Jackson, Mississippi: University Press of Mississippi, 2003.
- Caldwell, Mark. *The Last Crusade: The War on Consumption, 1862-1954*. New York: Atheneum, 1988.
- Connolly, Cynthia. *Saving Sickly Children: The Tuberculosis Preventorium in American Life, 1909-1970*. New Brunswick, N.J.: Rutgers University Press, 2008.
- Dubos, Rene and Jean. *The White Plague: Tuberculosis, Man, and Society*. New Brunswick, N.J.: Rutgers University Press, 1987.
- Dormandy, Thomas. *The White Death: A History of Tuberculosis*. New York: New York University Press, 1999.
- Duffy, John. *The Sanitarians: A History of American Public Health*. Chicago: University of Illinois Press, 1990.
- Ehrenreich, Barbara and Deirdre English. *For Her Own Good: Two Centuries of the Experts' Advice to Women*. New York: Anchor Books, 2005.
- Feldberg, Georgiana. *Disease and Class: Tuberculosis and the Shaping of Modern North American Society*. New Brunswick, N.J.: Rutgers University Press, 1995.
- Green, A. *The Man Bilbo*. Baton Rouge, Louisiana: Louisiana State University Press, 1963.
- Howard, Donald. *The WPA and Federal Relief Policy*. New York: Russell Sage Foundation, 1943.
- Leavitt, Judith and Ronald Numbers, ed. *Sickness and Health in America: Readings in the History of Medicine and Public Health*. Madison, Wisconsin: University of Wisconsin Press, 1985.
- Morgan, Chester. *Redneck Liberal: Theodore G. Bilbo and the New Deal*. Baton Rouge, Louisiana: Louisiana State University Press, 1985.
- Muncy, Robyn. *Creating a Female Dominion in American Reform, 1890-1935*. New York: Oxford University Press, 1991.
- Ott, Katherine. *Fevered Lives: Tuberculosis in American Culture since 1870*. Cambridge, Massachusetts: Harvard University Press, 1996.

- Reagan, Leslie. *When Abortion Was a Crime: Women, Medicine, and Law in the United States, 1867-1973*. Berkeley: University of California Press, 1997.
- Reis, Elizabeth. *Bodies in Doubt: An American History of Intersex*. Baltimore: Johns Hopkins University Press, 2009.
- Rosenberg, Charles. *The Care of Strangers: The Rise of America's Hospital System*. New York: Basic Books, Inc., 1987.
- Rothman, Shelia. *Living in the Shadow of Death: Tuberculosis and the Social Experience in American History*. New York: Basic Books, 1994.
- Shryock, Richard. *National Tuberculosis Association 1904-1954: A Study of the Voluntary Health Movement in the United States*. New York: National Tuberculosis Association, 1957.
- Sinclair, Upton. *The Jungle*. New York: Barnes and Noble Classics, 2003.
- Starr, Paul. *The Social Transformation of American Medicine*. New York: Basic Books, Inc., 1982.
- Teller, Michael. *The Tuberculosis Movement: A Public Health Campaign in the Progressive Era*. New York: Greenwood Press, 1988.
- Tomes, Nancy. *The Gospel of Germs: Men, Women, and the Microbe in American Life*. Cambridge: Harvard University Press, 1998.
- Underwood, Felix, M.D. *Public Health and Medical Licensure in the State of Mississippi, 1798-1937*. Jackson: The Tucker Printing House, 1938.

Articles

- Barry, Clifton, III and Maija S. Cheung. "New Tactics Against Tuberculosis." *Scientific American* (March 2009): 62-69.
- Bridgforth, Lucie. "The Politics of Public Health Reform: Felix J. Underwood and the Mississippi State Board of Health, 1924-58." *The Public Historian*, Vol. 6, No. 3 (Summer, 1984): 5-26.

Newspapers

- Associated Press, "Judge Orders TB Patient into Isolation," *USA Today*.
http://www.usatoday.com/news/health/2009-01-22-tuberculosis_N.htm, accessed August 18, 2009.

Evans, Amanda, WCIA Channel 3 News, “Man with Tuberculosis Ordered to Isolation,” Nexstar Broadcasting, Inc., <http://illinoishomepage.net/content/fulltext/?cid=65011>, accessed December 20, 2009.

Margolis, Luke, WBRZ Channel 2 News. “Tuberculosis Case Turns up in BR,” *The Advocate*. http://media.swagit.com/s/wbrz/The_Advocate/10202008-8.html, accessed January 20, 2010.

Theses/Dissertations

Haug, Ruth. “From the Ground Up: The Institutionalization of Public Health Administration in Mississippi.” Master’s thesis, Mississippi State University, 1995.

Higgs, David. “Eastman, Gardiner, and Co. and the Cohay Camps: A Mississippi Lumber Empire, 1890-1937.” Master’s thesis, Mississippi College, 1991.

Morgan, Chester. “Demagogue or Democrat: Theodore G. Bilbo and the New Deal.” PhD Dissertation, Memphis State University, 1982.

Whatley, Larry. “The New Deal Public Works Programs.” Master’s thesis, Mississippi State University, 1965.

VITA

Born in Baton Rouge, Louisiana, Ashley Baggett graduated from Louisiana State University in 2003 with a Bachelor of Science in secondary education with a concentration in social studies. After teaching at middle and high schools for five years, Ashley returned full time to Louisiana State University in 2008. She will receive her Master of Arts degree in United States history in May 2010. Ashley plans to continue her education at Louisiana State University, working toward her Doctor of Philosophy degree in history.