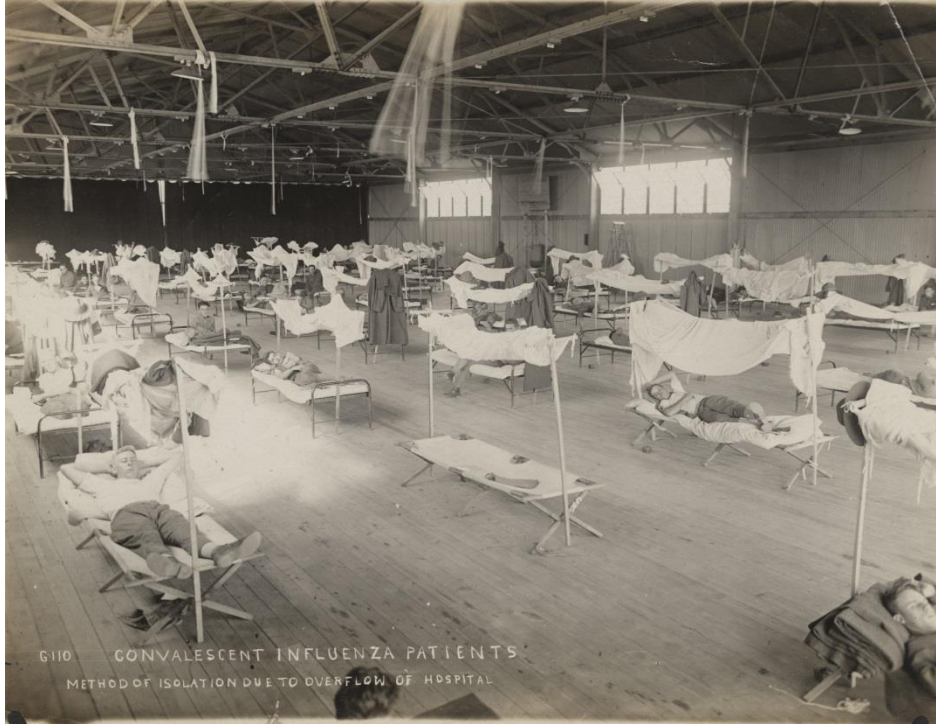


Take Less Medicine and More Advice:

Learning Arkansas Medical History through Summary Writing

Students Learning from Local and Statewide Historic Places



Influenza Patients at Camp Pike, 1918

Courtesy of the Butler Center for Arkansas Studies



ARKANSAS HISTORIC PRESERVATION PROGRAM

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An Agency of the Department of Arkansas Heritage

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Instructional Guidelines

GRADE LEVELS

6th – 8th

ESSENTIAL QUESTION

What is the most effective way to summarize secondary and primary sources?

ARKANSAS CURRICULUM FRAMEWORKS

CC ELA History/Social Studies 6-8.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

CC ELA Reading: Information Text 7.2: Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.

LESSON OBJECTIVE

To examine secondary and primary sources about the history of health and medicine in Arkansas and practice summarizing secondary sources and primary sources.

MATERIALS

- Secondary & Primary Source Summary Graphic Organizer
- Writing a Summary of a Secondary or Primary Source Worksheet
- Writing a Summary of a Secondary or Primary Source Rubric
- Primary and Secondary Sources
- Medicine in Arkansas during the Colonial Period (Secondary Source #1)
- Medicine in Arkansas During the Civil War (Secondary Source #2)
- Medicine in Arkansas's Gilded Age 1879-1900 (Secondary Source #3)
- Historic Sites related to Tuberculosis in Arkansas (Secondary Source #4)
- Historic Sites Related to Malaria in Arkansas (Secondary Source #5)
- Arkansas Historic Sites Related to the 1918 Influenza Pandemic (Secondary Source #6)
- Hospitals in Early 20th Century Arkansas (Secondary Source #7)
- Quackery in Arkansas during the 1930s and 1940s (Secondary Source #8)
- The Work of an Arkansas Country Doctor in the 19th Century (Primary Source #1)
- "Young Doctor on Horseback" (Primary Source #2)
- The Work of an Arkansas Country Doctor in the early 20th Century (Primary Source #3)
- A Day in the Life of a 21st Century Doctor (Primary Source #4)

Part 1: Working with Secondary Sources

I. Whole Group

- a. Explain secondary sources to the students, using the “Primary and Secondary Sources” handout in this packet. Tell them that they are going to use secondary sources to research the history of medicine in Arkansas and then summarize what they have learned.
- b. Have students read the secondary sources in this packet, either individually or as a whole class.
- c. Pick and choose from the readings as they relate to other material being covered at any one time, or read all the secondary sources, depending on classroom needs.

II. Pairs

- a. After reading one (or more) of the secondary sources, have students complete the “Secondary Source Summary Graphic Organizer” for the document in pairs. Ask them to rewrite the topic sentence of each paragraph or entry *in their own words*. Then ask students to identify three of the most important details in each paragraph, and write those details down *in their own words*. Topic sentences have been underlined in the readings to help students identify them.
- b. Have students transfer the material they put on the “Secondary or Primary Source Summary Graphic Organizer” onto the “Writing a Summary Graphic Organizer.”

III. Individual

- a. Instruct students to write a rough draft summary of each secondary source based on the information they put down on the “Writing a Summary Graphic Organizer.”

IV. Pairs: Peer Review

- a. Have students exchange their summaries and assess one another using the “Writing a Summary of a Secondary or Primary Source Rubric” included in this packet.
- b. Direct students to write down and discuss three things they can do to make their summaries better.

V. Individual: Revising

- a. Instruct students to rewrite their summary, based on results of their peer review pairing.

VI. Assessment

- a. Teacher will formally assess student summaries using the “Writing a Summary of a Secondary or Primary Source Rubric” in this packet.

Part II: Working with Primary Sources

- I. Whole Group
 - a. Explain primary sources to the students, using the “Primary and Secondary Sources” handout in this packet. Tell them that they are going to use primary sources to research the history of medicine in Arkansas and then summarize what they have learned.
 - b. Have students read the primary sources in this packet, either individually or as a whole class.

- II. Pairs
 - a. After reading one (or more) of the primary sources, have students complete the “Secondary & Primary Source Summary Graphic Organizer” for the document in pairs. Instruct them to rewrite the topic sentence of each paragraph or entry *in their own words*. Then direct students to identify three of the most important details in each paragraph, and write those details down *in their own words*. (Topic sentences have been underlined in the readings to help students identify them).

- III. Individual
 - a. Have students write a summary of each primary source based on the information they put down on the “Writing a Summary Graphic Organizer.”

- IV. Pairs: Peer Review
 - a. Have students exchange their summaries and assess one another using the “Writing a Summary of a Secondary or Primary Source Rubric” included in this packet.
 - b. Have students complete the “Revising a Summary Graphic Organizer” in this packet and discuss three things they can do to make their summaries better.

- V. Individual: Revising
 - a. Students will rewrite their summary, based on the results of their peer review.

- VI. Assessment
 - a. Teacher will formally assess students according to the “Writing a Summary of a Secondary Source Rubric” in this packet

General Resources

- National Museum of Civil War Medicine: <http://www.civilwarmed.org/>
- Civil War Trust, Teaching Materials on Civil War Medicine: <http://www.civilwar.org/education/history/civil-war-medicine/civil-war-medicine.html>
- National Museum of Health and Medicine has a digital exhibit on the Flu Pandemic of 1918: <http://www.medicalmuseum.mil/index.cfm>
- Mutter Museum at the College of Physicians of Philadelphia: <http://www.collegeofphysicians.org/mutter-museum/>
- University of Arkansas at Medical Sciences Historical Research Center: <http://library.uams.edu/library-services/historical-research-center/>

Arkansas Personalities in Medicine

- Dr. Edith Irby Jones, the first African-American woman to graduate from medical school in Arkansas. <http://www.thehistorymakers.com/biography/dr-edith-jones>
- More on Edith Irby Jones: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=2393>
- Ida Josephine Brooks: the first female faculty member at the University of Arkansas for Medical Sciences: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=6>
- Jocelyn Elders, former United States Surgeon General from Arkansas: <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=2240>

Secondary & Primary Source Summary Graphic Organizer

| Paragraph 1 | |
|--|--|
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 2 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 3 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |

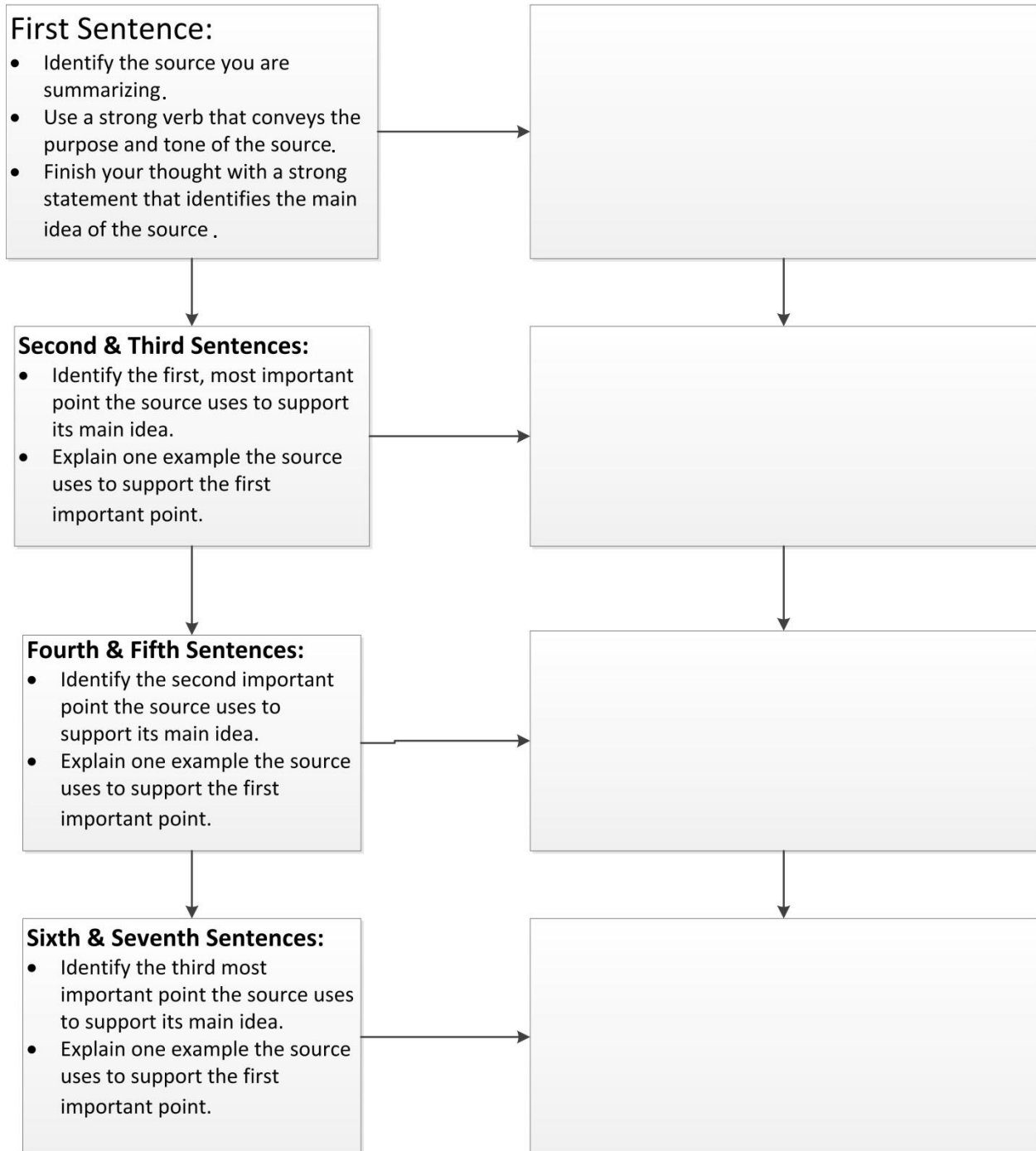
| Paragraph 4 | |
|--|--|
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 5 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 6 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |

| Paragraph 7 | |
|--|--|
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 8 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 9 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |

| Paragraph 10 | |
|--|--|
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 11 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |
| Paragraph 12 | |
| Topic Sentence (Rewrite in Your Own Words) | |
| Key Detail #1 | |
| Key Detail #2 | |
| Key Detail #3 | |

Writing a Summary of a Secondary or Primary Source Worksheet

Use all the “Secondary Source Summary Graphic Organizers” for the readings you have been assigned to help develop your summary. Remember that a summary is an accurate representation of what someone else said, and does not include any of your own personal thoughts about the subject. A summary is always written *in your own words*.



Remember! Summaries generally do not have conclusions.

Writing a Summary of a Secondary or Primary Source Rubric

| Excellent | Good | Below Average | Ineffective |
|---|---|--|--|
| The main idea of the source is clearly written in the writer's own words. | The main idea of the source is mostly clearly written in the writer's own words. | Main idea of the source is unclear-not specifically stated in the writing. | The main idea of the source is not present. |
| All important details are included, in the writer's own words, not the words of the source. | Important details are included but some might be missing, all are written in the writer's own words, not the words of the source. | Some critical information is missing. | Contains only some details. |
| Details are presented in logical order. | Ideas are presented in logical order. | Ideas are in random order and not logical. | Ideas are not in a logical order. |
| Demonstrates clear understanding of information in the text. | Demonstrates adequate understanding. | Demonstrates basic understanding of information in text. | Demonstrates little or no understanding. |
| Is characterized by paraphrasing of the main idea and significant details. | Is characterized by paraphrasing of the main idea and significant details. | Is characterized by the substantial copying of key phrases and minimal paraphrasing. | Is characterized by the substantial copying of indiscriminately selected phrases or sentences. |

Primary and Secondary Sources

Primary Sources: A primary source is a document or object that was written or created during the time you are studying. These sources are created by people who were present during an experience or time period and offer an inside view of a particular event.

Examples of Primary Sources:

- Diaries
- Letters
- Eyewitness newspaper stories
- Speeches
- Interview transcripts
- Autobiographies
- Film footage/photographs
- Government records
- Business records

Secondary Sources: Writing that relates and explains information from primary sources. They use eyewitness accounts, government documents, other people’s personal experience, legal documents and other *primary sources* to explain and interpret history.

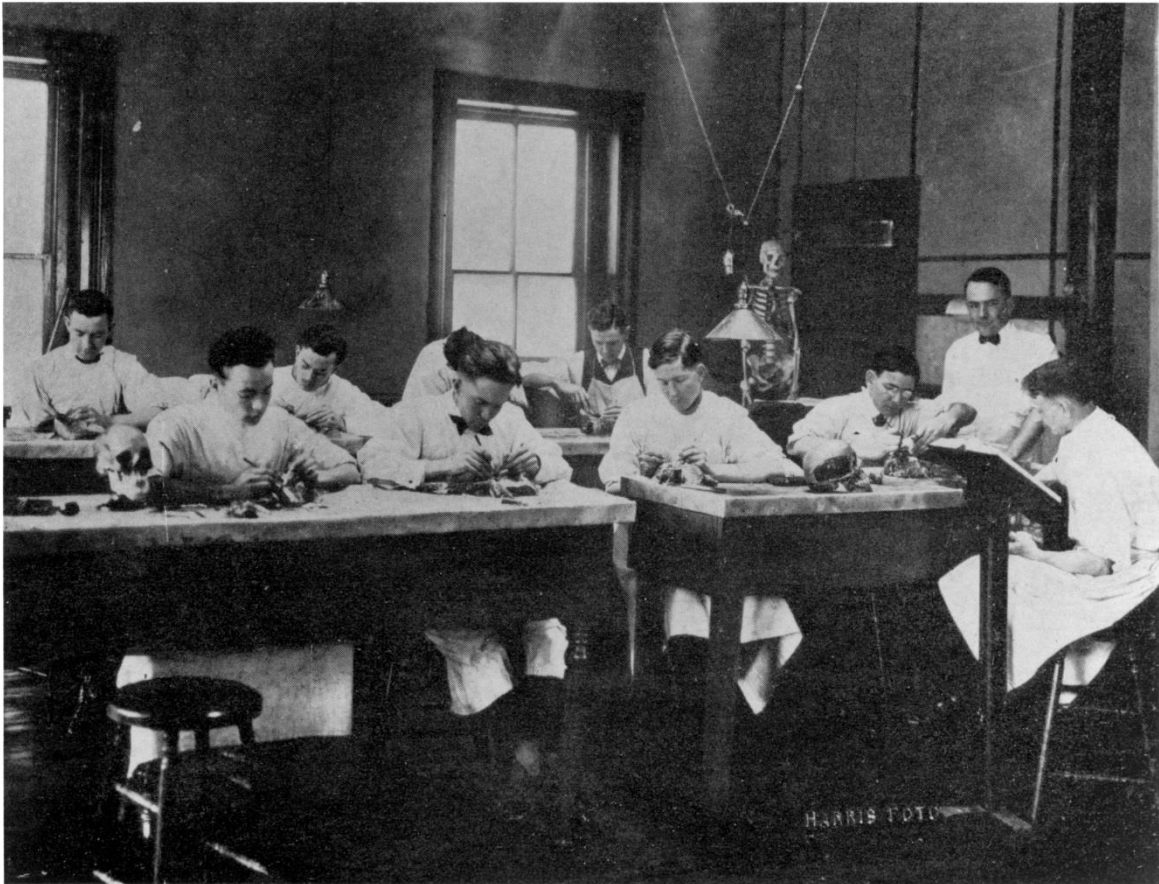
Examples of Secondary Sources:

- Information in textbooks
- Essays written by experts in a particular subject area
- Reference books (encyclopedias)
- Popular magazines
- Essays on websites that explain and interpret experiences from others

Primary v. Secondary Sources

| Primary Source | Secondary Source |
|--|--|
| A doctor’s diary of his experiences treating patients during the 1870s. | An article about the everyday lives of doctors during the 19 th century |
| A doctor’s financial ledger from 1900-1907 | An article about paying for health care in the early 20 th century |
| An interview with a patient and her experiences going to the doctor during the 1930s | An essay on the changes in patients’ experiences from the 1930s to the present |
| An autobiography of a doctor’s experiences treating patients in the 1940s | An article about medicine during World War II |

Part I: Secondary Sources



Students at the Arkansas Medical College, 1912
Courtesy of the University of Arkansas of Medical Sciences

Medicine in Arkansas during the Colonial Period

(Secondary Source #1)

The history of health and disease in Arkansas began before Europeans ever arrived.

For more than 10,000 years, people have lived in Arkansas. However, we know almost nothing about what these people thought about disease or how they healed themselves. This changed in the 1500s. There was a large group of Native Americans who lived in Eastern Arkansas. This was the end of the Mississippian phase of Native American settlement. One Mississippian settlement was Casqui, near the site of Parkin, Arkansas, in Cross County. In 1541, everything would change for the people who lived at Casqui, because some very unusual visitors would arrive.¹

In 1539, the Spanish explorer Hernando De Soto arrived in Florida with 600 men, more than 200 horses, and dozens of pigs. He and his expedition marched across what is now the United States, and eventually became the first Europeans to set foot in Arkansas. When De Soto and his group arrived at Casqui (Parkin Archeological State Park), they brought with them diseases that were unknown in North America.

Archeologists believe that the people of Eastern Arkansas had no immunity to these diseases. The results were catastrophic. When French explorers Marquette and Joliet began exploring the Mississippi Valley 130 years after DeSoto, all they found were a few small villages along the Mississippi. The Parkin site was abandoned, and Quapaw were living in the area. So what happened to the people at Casqui?

Experts aren't quite sure. Historians do know that DeSoto and other Europeans brought diseases that decimated the native populations. Native Americans had never encountered some European diseases, such as smallpox and influenza, and these could have wiped out entire villages. We all know what the flu is, but what is smallpox? It was a disease that caused sufferers to break out in boils all over their body, causing pock marks on the skin. It was one of the most dangerous diseases in all of history, and was unknown in North America before Europeans brought it with them.² Smallpox continued to impact the local Native populations for a very long time. In 1720, the Quapaw were once again devastated by the disease. Other epidemics impacted them in 1747-1748, and in 1750-1752. Another epidemic swept through the Red River valley in 1777 and 1779.³

¹ Dickinson, Samuel D. "Health and Death in Early Arkansas 1541-1803." In *Contributions to Arkansas Medical History: History of Medicine Associates Research Papers, No. 1*, 5-7. Charlotte, NC: History of Medicine Associates, 1990.

² Ibid, 9.

³ Ibid, 42-43.

In 1686, Henri De Tonti, an Italian born explorer working in the service of the French king, established a permanent settlement at Arkansas Post, about 35 miles from the mouth of the Arkansas River, in present-day Arkansas County. This settlement became the first permanent European settlement in the Mississippi River Valley. Arkansas Post remained an active settlement for the next 130 years. During that time, settlers at the post were isolated from the rest of European society in New Orleans. This meant that they were also isolated from the kinds of services they could have had access to in the city. In the earliest days of the settlement, there were no doctors at Arkansas Post. The settlers turned to nearby Native Americans for help when they became sick. ⁴

The French called the shamans of the Quapaw and other nearby tribes “jongleurs.” They performed the same duties as priests, doctors and surgeons. One of the common practices used by the jongleurs included “sucking the afflicted parts of patient’s body or his wounds.” ⁵ They also used various ceremonies, like singing, as medical treatment.

Jongleurs also used a very specific Arkansas resource: the thermal springs at the present site of Hot Springs, in Garland County. Many early European settlers also believed that the springs were curative. One expedition explained how Native Americans used the springs. “They made a hurdle of branches over the water and an invalid, who was badly swollen from dropsy, in it. A blanket was spread over him. While he lay there he sipped hot water and from time to time he rubbed his abdomen with a hot rock from the bottom of the stream. After he had sweated profusely and had grown weak, the physicians carried him down the creek and immersed him in cold water.”⁶

In 1719, French authorities decided that there needed to be a surgeon in every settlement in the territory, including Arkansas Post. In 1721, the post had forty-seven inhabitants, including a surgeon, an apothecary, a storekeeper, a military garrison, and several indentured servants. In 1732, the post budgeted 480 livres a year for a surgeon to settle at the post. It was clear that this physician was valued, because he was paid only 120 livres less than the post’s commander.⁷⁸

Even when Arkansas Post was lucky enough to have a doctor present, the medical theories and practices of the time were sometimes worse than the disease. Well into the 19th century, medicine did not have any notion of the concepts of infection or proper sanitary procedures. One major medicine used during this time was mercury. Today we

⁴ Ibid, 5-56.

⁵ Ibid, 22.

⁶ Ibid, 26.

⁷ Ibid, 27.

⁸ The Encyclopedia of Arkansas History & Culture. "European Exploration and Settlement, 1541 through 1802 - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=2916>.

know that mercury is poisonous. However, at the time, it was considered a staple of any doctor's medicine cabinet. Another standard medical practice at the time was using a lancet to bleed patients, to rid them of "bad blood." This meant that sick people would have their blood drained, using a sharp knife. Today we know that this would make many illnesses much worse.⁹

Popular opinions about medicine also made it difficult for medical advances to take hold before the 20th century. In the late 1700s, people became aware for the first time that it was possible to inoculate someone against smallpox using the scabs of smallpox pustules or pimples. First, doctors noticed that people who survived smallpox never got the disease again. Second, they noticed that milk maids, who were often exposed to cow pox (a related disease) did not develop smallpox. The inoculation exposed the patient to a less virulent version of the disease, and then made him or her thereafter immune.¹⁰

The first smallpox inoculations in Arkansas were introduced by a Native American shaman in 1770. Most people were afraid of such inoculation because they believed it would spread the disease, rather than protect against it. However, the shaman had seen inoculations done in the Carolinas, and convinced a few Quapaw to try it out. According to historian Samuel Dickinson, when three people who were inoculated came down with smallpox, the community was very upset and expected an epidemic to break out at any point. They exiled the poor shaman.¹¹

In the early 1800s, something happened that changed America and Arkansas forever—for both white settlers and Native Americans. During the 1700s, this land had been claimed by France, then Spain, then France again. France sold Arkansas to the United States in 1803 as part of the Louisiana Purchase. This made Arkansas part of the United States for the first time. It also meant that a large influx of settlers would arrive soon, and the population of Arkansas would change from a few scattered European settlers and ever-shrinking Native American populations, to settlements with towns and cities. Medical practices, however, didn't change much at all until the 1860s.

⁹ Ibid, 5-56.

¹⁰ Ibid, 5-56.

¹¹ Ibid, 44-45.

Medicine in Arkansas During the Civil War

(Secondary Source #2)



Civil War era field hospital

The Civil War brought serious challenges to doctors that they had never faced before. When the Civil War broke out in 1861, many men from rural areas began to gather together in large groups for training before they went into battle. It was often the first time that many of these men had been away from home, where they were isolated from large disease outbreaks because they generally lived in rural areas that were

difficult to reach. Once these men arrived at camp, however, they were immediately exposed to diseases to which they had no resistance. In addition, most camps had poor sanitation. There was often poor food, too. As a result, more men died from disease during the Civil War than died from injuries in battle. The most common killers were measles, yellow fever, typhoid, cholera, pneumonia, smallpox and dysentery. Dysentery was the number one killer during the war.¹²

Another reason the Civil War was so deadly was infection. Doctors did not yet know about germs, and did not have access to antibiotics. As a result, many of the medical practices during this time simply made many people worse off. For example, doctors thought that pus coming out of a wound was a good sign and would often transfer pus from one patient to another, thinking it would help the second patient recover faster. Surgeons often did not clean their instruments between patients, either, meaning that infection was extremely widespread.¹³

Three-fourths of a Civil War surgeon's time was spent amputating limbs. Amputation was often a soldier's best chance for survival, since it could stop the spread of gangrene, which occurs when body tissue dies. Amputation had to happen as soon as possible, and certainly within 48 hours after a soldier was wounded. After that time period, gangrene or infection would set in, and the soldier was more likely to die.¹⁴ Most of these amputations took place in a field hospital, like the one pictured above. Field

¹² Civil War Trust: Saving America's Civil War Battlefields. Accessed August 13, 2014.
<http://www.civilwar.org/education/pdfs/civil-war-curriculum-medicine.pdf>.

¹³ Ibid

¹⁴ Ibid

hospitals were set up using tents so that the wounded could be treated quickly. After a soldier was treated, or had a limb amputated, he was likely then transferred to another hospital for long-term recovery. One such “permanent” hospital was located in Little Rock.

Because there were very few hospitals during this time period, other buildings were commandeered by both the Union and the Confederate forces and turned into hospitals. One such building is the Woodruff House, which sits on East 9th Street in Little Rock. The owner of the Woodruff House, William E. Woodruff, was the owner and publisher of the first newspaper in Arkansas, the *Arkansas Gazette*. Woodruff was a strong supporter of the Confederacy, so when Little Rock fell to Union forces on September 10, 1863, he was surrounded by the enemy. He wrote a letter to a friend that was intercepted by the Union forces, and General Frederick Steele banished Woodruff from the city. He also took over Woodruff’s house. While the Union army occupied the house, they used it as an officers’ headquarters and an officers’ military hospital. The Woodruff House is still standing in Little Rock.¹⁵ It was very near St. Johns College, which was located just east of present day McArthur Park in Little Rock. The college was used as the site of a hospital for both Confederate and Union troops. Nothing remains of this location today.¹⁶



Dr. Jackson’s Cave Hospital, Eureka Springs, Carroll County
Courtesy lakeleatherwoodcitypark.com

Eureka Springs exists thanks mostly to the efforts of one man – Dr. Alvah Jackson. During the Civil War Dr. Jackson treated soldiers on both sides of the conflict. When Federal troops began to occupy the region he was forced to hide his Confederate patients deeper in the mountains. Because of its remoteness, the Rock House Spring offered his patients not only safety but shelter and abundant fresh water. The

bluff shelter became known as “Dr. Jackson’s Cave Hospital.” The doctor had little or no medicine. He treated with

remedies learned from Native Americans who often still visited the springs. Using herbs, roots, bark, and most importantly water from the surrounding springs, he nursed many soldiers back to health. Lore taught that the different springs had the ability to cure

¹⁵ The Encyclopedia of Arkansas History & Culture. "William Edward Woodruff (1795-1885) - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=2533>.

¹⁶ The Encyclopedia of Arkansas History & Culture. "St. Johns' College - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=3584>.

different ailments. After the war, he began marketing the water as “Dr. Jackson’s Eye Water,” which made Eureka Springs even more famous, and began to attract tourists.¹⁷

Arkansas recovered slowly from the Civil War because of the spread of disease. There were epidemics of diseases like yellow fever, smallpox, and typhoid, but there were also chronic diseases that never went away. The four most significant of these include hookworm, tuberculosis, malaria, and pellagra. These diseases helped contribute to the stereotype of southerners that they were lazy, because many of these diseases cause lethargy. It wouldn’t be until the 20th century that Arkansas began to successfully fight these diseases.^{18 19}

¹⁷ The Encyclopedia of Arkansas History & Culture. "Eureka Springs (Carroll County) - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=843>.

¹⁸ The Encyclopedia of Arkansas History & Culture. "Health and Medicine - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=392>.

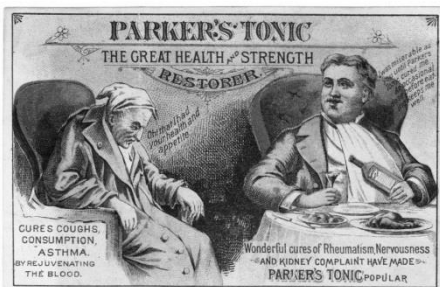
¹⁹ DeHaven Pitcock, Cynthia. *The Old State House and the Crossett Experiment*. Little Rock: Arkansas Historic Preservation Program, 1997.

Medicine in Arkansas's Gilded Age 1879-1900

(Secondary Source #3)

After the Civil War, scientists' theories about the causes of disease began to change. Until the late 19th century, doctors thought epidemics and other diseases were caused by miasma. Miasma comes from an ancient Greek word meaning "pollution." Miasma was believed to be caused by environmental factors— bad air or water, or poor sanitation.²⁰

From the 1850s-1880s, doctors began to question the miasma theory of disease. Louis Pasteur, a French chemist, began experiments in the 1860s that proved the existence of microorganisms as a cause of puerperal fever. Robert Koch, a German physician, proved that microorganisms caused tuberculosis, anthrax, and cholera. Joseph Lister, a British surgeon, showed that disinfection was key to successful surgery – something doctors didn't know during the dark days of the Civil War. Lister is responsible for the fact that doctors now know they must wash their hands and sterilize surgical rooms.²¹



It took a long time before American doctors caught up with the advancements in Europe, including belief in the germ theory of disease. This was the age of the patent medicine, concoctions developed by doctors (and those who called themselves doctors) that were supposed to cure a number of ailments. The images to the left show that these "medicines" were considered "cure alls." The top advertisement at left claims that Parker's Tonic cures coughs, consumption, and asthma as well as rheumatism, nervousness, and kidney disease. Dr. Pierce's "spring tonic" and "blood purifier" was meant to make men stronger and more virile.



Part of the problem with advancements in medicine in the United States had to do with the state of medical education. Most medical schools in the country accepted anyone who applied, and often gave students no practical or clinical experience during their studies. Their classes were almost all lectures, with very little hands-on experience. Medical schools rarely conducted research during this time, which meant that very little innovation was being made by the American medical community.²²

²⁰ Jonathan and Karin Fielding School of Public Health. "Competing Theories of Cholera." Accessed August 13, 2014. <http://www.ph.ucla.edu/epi/snow/cholera theories.html>.

²¹ Science Museum, London. "Joseph Lister (1827-1912)." Accessed August 13, 2014. <http://www.sciencemuseum.org.uk/broughttolife/people/josephlister.aspx>.

²² Baird, W. David. "The Beginning." In *Medical Education in Arkansas, 1879-1978*, 22-46. Memphis: Memphis State University Press, 1979.

During the early and mid-19th century, there was no formal medical education in Arkansas. One of the reasons that there was no medical school was related to state laws that forbid anyone from dissecting cadavers. Dissection of cadavers was an important part of medical education because it allowed students to see how bodies actually work. In 1873, under pressure from the Arkansas State Medical Association, the state legislature changed this law. In November of 1874, the first dissection happened inside a shed on the St. John's College campus. In the 1920s, the Arkansas State Medical Association erected a monument to commemorate the event.²³



Sperindio Hotel, site of the first medical college in Arkansas.
Courtesy the University of Arkansas for Medical Sciences

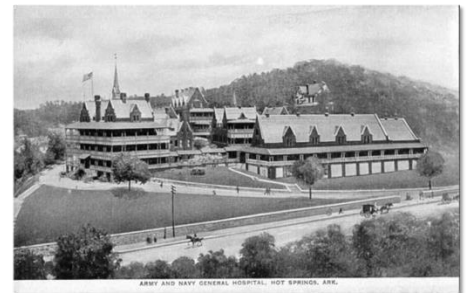
The Medical Department of Arkansas Industrial University (now University of Arkansas at Fayetteville), was founded in Little Rock in 1879. It's first location was at 113 west Second Street, in the former Sperindio Hotel. The second location of the medical department was located at Sherman & East 2nd Street in Little Rock, built in 1890. Six years later, the city built the Logan H. Roots hospital next door. It was a charity hospital that took only indigent patients. The hospital allowed students of the Medical Department to get real world clinical

experience while they studied.

Things were beginning to change in American medicine, but slowly.²⁴

Old ideas about medicine impacted how political and other leaders dealt with public health issues. For example, the first version

of the Army-Navy Hospital in Hot Springs was built in the late 1880's, and was located there partly due to the proximity to the thermal springs. It was also the first general hospital for the Army and Navy established during peacetime.



First Army Navy Hospital in Hot Springs



Gann Building, Benton, Saline County

Being a doctor was very different in the 19th century than it is today. There were no insurance companies to make sure that doctors got paid, and no debt collections to get that money from patients who couldn't afford treatment. Because of this, doctors would often take trade for their services rather than money. This clinic building is a result of such a trade. Dr. Dewell Gann, Sr.'s patients donated their labor to build this

structure, in lieu of paying their medical bills. This building is important for other reasons. It is the only building in the world built of bauxite, an ore that is refined to create aluminum. Bauxite ore is very soft, so the blocks were cut by hand and then allowed to harden for six weeks.

²³ The Encyclopedia of Arkansas History & Culture. "University of Arkansas for Medical Sciences (UAMS) - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=2395>.

²⁴ Ibid

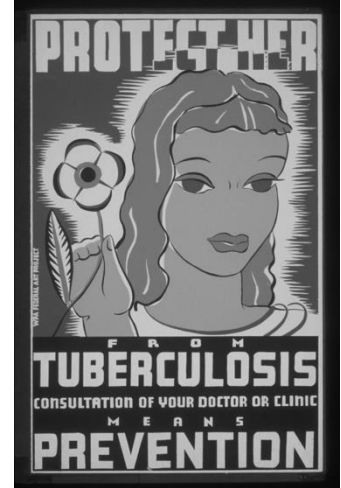
Historic Sites related to Tuberculosis in Arkansas

(Secondary Source #4)

In the United States, the fight against tuberculosis essentially began in 1884 with Edward Livingston Trudeau, a New York doctor who contracted the disease.

After Dr. Alfred Loomis, another New York physician, recommended that Dr. Trudeau spend some time in the Adirondack Mountains, he was elated by a noticeable improvement in his disease. As a result of the positive results of the time spent in the Adirondacks, Trudeau decided to build a sanatorium outside of Saranac Lake, New York. The first building at the sanatorium, a two-patient cottage called "Little Red," was built in 1884.

The increased awareness of tuberculosis and increased efforts to fight the disease was part of a larger movement in the late 19th and early 20th centuries to eradicate some troublesome diseases around the country and especially in the South. The South often fell victim to epidemics that swept the river valleys of the region with great regularity, including tuberculosis. These diseases slowed down the region's recovery after the Civil War. As a result, in the late 19th century, fighting these diseases became a crucial element in the region's recovery and advancement.²⁵ In the early days of tuberculosis treatment prior to 1900, the majority of patients received treatment in private facilities, although there were no known private sanatoria in Arkansas.



Arkansas Tuberculosis Sanatorium,
Booneville, Logan County

Act 378 of the Legislature, was approved by Governor George Donaghey on May 31, 1909, and appropriated \$50,000 for the establishment of a tuberculosis sanatorium and \$30,000 for two years of maintenance. The facility was located approximately 2.5 miles south of Booneville on "The Hill." The Arkansas Tuberculosis Sanatorium is comprised of 76 buildings, structures, and objects located on approximately 900 acres.²⁶ The establishment of the sanatorium at Booneville was a pioneering effort for a state to provide specific tuberculosis care. However, the problem of the growing number of tuberculosis cases was not felt just at the sanatorium in Booneville. In Little Rock,

²⁵ Cynthia DeHaven Pitcock. *The Old State House and the Crossett Experiment*. Little Rock: Arkansas Historic Preservation Program, 1997.

²⁶ The Encyclopedia of Arkansas History & Culture. "Arkansas State Tuberculosis Sanatorium - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=2237>.

for example, tuberculosis was also a problem. According to a 1914 survey, from 1909 to 1913, Little Rock alone lost an average of 101.6 people to tuberculosis each year (an average of 45.3 whites and 56 blacks).²⁷

By the late 1930s, the sanatorium was full and needed more beds. An ambitious building program, funded by the PWA (Public Works Administration), a government agency that funded large building projects and public works during the Great Depression, allowed the sanatorium to double its patient capacity, and build many other new facilities.



Hudson Sanatorium, Newton County

Although the Arkansas Tuberculosis Sanatorium was a high tech facility, not everyone who had the disease could get treatment there. Treatment was not free. It was also difficult for patients from the more rural parts of the state to get to Booneville. A doctor from one of the most remote parts of Arkansas wanted to change that. Dr. William Andrew Hudson was part of a family that first came to rural Newton County, Arkansas, in 1820, and settled in the area just a few years thereafter. The Hudson family has remained on the property ever since.

Dr. Hudson graduated from medical school in St. Louis in 1920 and spent most of his career working in Detroit. However, in the 1930s, he decided to begin building a private sanatorium for rural patients who could not get to the Booneville facility. He began construction on family property in Newton County, but by the time World War II started, materials for building became harder to come by and state laws government sanatoriums worked against him. The sanatorium was never completed, although the original buildings still remain standing.²⁸

²⁷ Arkansas Historic Preservation Program. "Arkansas Tuberculosis Sanatorium Historic District, Booneville, Logan County." Accessed August 13, 2014. http://www.arkansaspreservation.com/historic-properties/_search_nomination_popup.aspx?id=2279.

²⁸ Saving Arkansas Places. "Arkansas Properties on the National Register of Historic Places: Dr. Hudson Sanitarium Agricultural Building Historic District, Jasper, Newton County – Saving Arkansas Places." Accessed August 13, 2014. <http://blog.arkansaspreservation.com/arkansas-properties-national-register-historic-places-dr-hudson-sanitarium-agricultural-building-historic-district-jasper-newton-county/>.

Historic Sites Related to Malaria in Arkansas

(Secondary Source #5)



Old State House while it was the location of the Arkansas Medical College, Little Rock, Pulaski County
Courtesy University of Arkansas of Medical Sciences

Malaria had a huge influence on Arkansas history from its very beginnings. The disease spread from Africa to Europe, and then to North America via the earliest explorers. In the 1720s at Arkansas Post, visitors reported finding huge swarms of mosquitos. However, people didn't yet know that the disease was spread by mosquitos.²⁹

In the early days of the state's history, people believed this deadly disease was caused by "bad air" and that it was healthier to live in places with a higher elevation. Locations for important institutions in the state, like the University of Arkansas in Fayetteville, were chosen specifically because the mountains were considered less prone to malaria than the Delta.³⁰

One Arkansan helped advance the treatment of the disease. Dr. Zaphney Orto was a US Army surgeon during the Spanish-American War. He was born in Tennessee but settled in Walnut Ridge in the 1870s. In the 1880s, he became convinced that malaria was not caused by heat, moisture and vegetation decay but was instead caused by the mosquito. His research presented to the State Medical Society of Arkansas helped spur further research into the eradication of mosquitos to control malaria.³¹

In the early 1900s, a movement began in Arkansas to establish an Department of Health to deal with public health problems in Arkansas, and to oversee treatment. Around the same time that the state was establishing a Department of Health, there was movement to reform medical education in Arkansas. In an attempt to modernize medical education, two "for profit" medical schools in the state were consolidated and put under the umbrella of the University of Arkansas, when the state government moved from the Old State House to the new capitol building in 1912.³²

Crossett in Ashley County was a town literally built by a lumber company to house their workers. It was at Crossett that researchers conducted something called the "Crossett

²⁹ The Encyclopedia of Arkansas History & Culture. "Malaria - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=4780#>.

³⁰ The Encyclopedia of Arkansas History & Culture. "University of Arkansas, Fayetteville (UA) - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=2163>.

³¹ The Encyclopedia of Arkansas History & Culture. "Malaria - Encyclopedia of Arkansas." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=4780#>.

³² DeHaven Pitcock, Cynthia. The Old State House and the Crossett Experiment. Little Rock: Arkansas Historic Preservation Program, 1997.

Experiment.” Researchers from the medical school at the Old State House started working on draining sites of standing water, spraying to eradicate mosquitoes, and encouraging people to treat water reserves with “niter-cake,” a salt substance that kept mosquitos from breeding. They also began putting screens on people’s windows.

All of their effort paid off. In one year, malaria cases in the area were reduced by 72%. This experiment became the basis for malaria eradication programs around the world, and made the medical school famous. It is this experiment that made the Old State House eligible to become a National Historic Landmark, because the Crossett Experiment impacted public health all over the U.S. and the world. ³³

³³ Ibid

Arkansas Historic Sites Related to the 1918 Influenza Pandemic

(Secondary Source #6)



Influenza patients at Camp Pike during the 1918 Influenza Pandemic, North Little Rock, Pulaski County

Courtesy of the Butler Center for Arkansas Studies

During the final months of World War I, when the United States finally joined the war, a terrible monster was quickly circling the globe. That monster was influenza. It began in Haskill, Kansas, in March of 1918. By 1919, the flu had spread so far and so fast that an conservative estimate of the dead was 50 million people worldwide. More people died in the United States during the pandemic than died in World War I. The pandemic was especially bad at places where young soldiers, many fresh from rural farms, came together in large numbers, like military training camps. Two of those places were in Pulaski County, Arkansas.³⁴

Fort Logan Roots is located at the top of what is called the “Big Rock” or “Le Rocher Francais” (the French Rock). It is just upstream from the “Little Rock” that gives the city its name. Big Rock Mountain was chosen in 1893 as the site for the U.S. Army’s new military post. After the U.S. declared war on Germany on April 5, 1917, entering World War I, military officials soon realized that the 1,100-acre Fort Roots was not sufficient to train the increased number of troops required. The War Department sought to establish larger training facilities and on June 17, 1917, again selected North Little Rock as the site for a post. The new facility, called Camp Pike, was easier to access and accommodated a larger number of men. Camp Pike was ready to accept soldiers by September 1917, replacing Fort Roots as the major military training facility.



Hospital Building at Fort Logan Roots

So many young men came down the flu at Fort Roots and Camp Pike that extra places had to be found to handle the overflow of patients. Patients were housed in temporary tents, hangars, and basically any place that could be found to keep them isolated from the healthy population. Fort Roots always maintained a hospital, and during the 1918 influenza epidemic, a barracks was converted to a hospital ward to accommodate the increased patient load. Therefore, it made sense for the fort to be transferred in 1921 to the Public Health Service for use as a veterans’ hospital. It has remained a veteran’s hospital since the 1920s.

³⁴ Flu.gov. "The Great Pandemic : The United States in 1918-1919." Accessed August 13, 2014. <http://www.flu.gov/pandemic/history/1918/index.html>.

Hospitals in Early 20th Century Arkansas

(Secondary Source #7)



Smith Hospital, Paris, Logan County

Until the twentieth century, it was actually rare for small towns to have hospitals. Two brothers, John and Arthur Smith, both became doctors in the later part of the 19th century. In 1899, John Smith settled in Paris in Logan County and opened a practice. His brother Arthur joined him there in 1901. They dreamed of opening the first hospital in Logan County. They built the first portion of the hospital in 1913, and expanded it in 1922. Besides the fact that this hospital was the first one in Logan County, it is important because the Smith doctors offered what may be the first medical insurance program in the country.

The hospital itself operated until 1971, staffed by two generations of Smith Family doctors. Today, the building is abandoned, but it is still owned by John Smith, a descendant of the original Dr. John. It is also left exactly the way it was when the hospital shut down. If you are lucky enough to get a tour of this building, you will find offices that look very much like they did when the hospital was in operation.³⁵



Trinity Hospital, Little Rock, Pulaski County

Trinity Hospital was incorporated in 1923 by five Little Rock doctors. When Trinity Hospital opened, it was a fee-for-service hospital like other Little Rock hospitals. But in 1931, Trinity began its prepayment medical program called the "Agreement for Annual Medical Services." This was a new approach to medical care delivery in Arkansas and was intended to protect people with a small or moderate income from financial disaster as a result of high or unforeseen medical bills. Rates were \$2

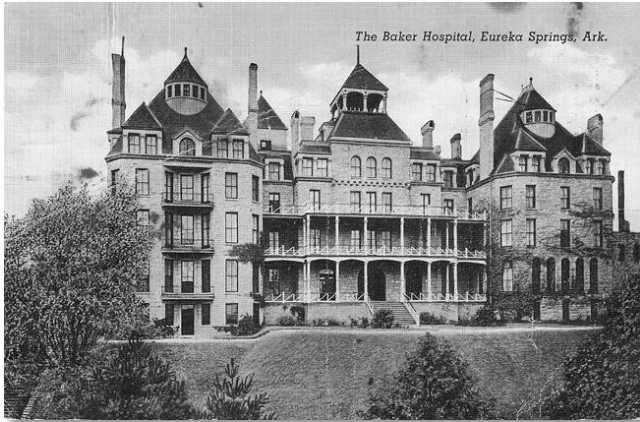
per month for individuals in groups, \$2.50 a month for group families, and \$5 a month for non-group families. The plan covered internal medicine, surgery (except for brain surgery), obstetrics, pediatrics, eye, ear, nose and throat, laboratory tests, X-rays, and physiotherapy. It did not, however, cover African-Americans. Although the development of prepaid medical plans—or today's HMOs—began around the turn of the 20th century for employees of hazardous industries like lumbering, mining, and railroading, private clinics didn't begin offering this type of service until the late 1920s and early 1930s.³⁶

³⁵ Arkansas Historic Preservation Program. "SMITH HOSPITAL, PARIS, LOGAN COUNTY." Accessed August 13, 2014. http://www.arkansaspreservation.com/historic-properties/_search_nomination_popup.aspx?id=409.

³⁶ Silva, Rachel. "Sandwiching in History: Trinity Hospital." Arkansas Historic Preservation Program. Accessed August 13, 2014. http://www.arkansaspreservation.com/pdf/tour_scripts/trinity_hospital_tour_script_2010.pdf.

Quackery in Arkansas during the 1930s and 1940s

(Secondary Source #8)



Crescent Hotel when it was the Baker Hospital, Eureka Springs, Carroll County

As medical science began to develop into what we know now—a discipline based on scientific studies—it took a much longer time for people to understand that medicine could actually be helpful to them. Many people kept old ideas from the 19th century that medical doctors did more harm than good, despite great medical advances during the period. This belief held by so many people (and still held by many today) was inflamed by people claiming to have medical knowledge, but who are

really just taking advantage of people’s ignorance of science. These doctors are called “quacks.” There were two very famous quacks that operated in Arkansas during the 1920s and 1930s.

In 1937, a man named Norman Baker bought the Crescent Hotel in Eureka Springs. He wanted to turn it into a “cancer hospital” for the “cancer cure” he claimed to have invented. In reality, this “cure” was nothing more than clover, corn silk, watermelon seed, and water. Baker owned a 10,000-watt radio station for many years, which covered the entire nation. He was known for supporting political causes, and for his Anti-Catholic and anti-Jewish views. In 1929, he began to denounce the American Medical Association and claim that he had a cancer cure, despite his lack of medical training. The hospital stayed in business at Eureka Springs until the 1940s, when Baker



Marylake Monastery when it was the Brinkley Hospital, East End, Saline County

was convicted of mail fraud for making false claims in his advertising materials.³⁷

Another famous quack, named John Brinkley, was operating in Arkansas at the same time as Norman Baker.

Unlike Norman Baker, John Brinkley did have medical training and much of his interest in using animal glands to help rejuvenate older men was a

³⁷ The Encyclopedia of Arkansas History & Culture. "Norman Baker (1882-1958)." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=4885>.

legitimate medical interest. Unfortunately, it was never actually tested scientifically and there was no proof of its usefulness. By the time Dr. Brinkley came to Arkansas in the late 1930s, he was already very wealthy and famous. He got his wealth and fame in a manner very similar to Norman Baker—a highpowered radio station that promoted his alleged cures. In 1937, Dr. Brinkley bought the old Shriner's Country Club in Saline County and converted it into a hospital. By the 1940s, lawsuits exposed his cure as nothing but colored water and a useless surgery. ³⁸

³⁸ The Encyclopedia of Arkansas History & Culture. "John Richard Brinkley (1885–1942) -." Accessed August 13, 2014. <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=1105>.

Part II: Primary Sources



Patient Dining Room at the Arkansas Tuberculosis Sanatorium
Courtesy of Charlotte Brown

The Work of an Arkansas Country Doctor in the 19th Century

(Primary Source #1)

Introduction:

Dr. Frank L. James was much more than just a country doctor. He studied chemistry and civil engineering in Europe, and worked as a newspaper editor, surveyor, and county clerk. He took up the practice of medicine in Arkansas around 1870. Dr. James kept a diary of his work and life in Osceola, Arkansas, between 1877 and 1878. The following selections from Dr. James's diary below recount some of his experiences with patients. These selections come from Years of Discontent: Doctor Frank L. James in Arkansas, 1877-1878, edited by W. David Baird.

Tuesday November 6, 1877

Another dull day—that is dull “**medicinally**” speaking. About 5 o'clock [Dr.] Dunavent came up and informed me that Mrs. Stratton wanted him and me to “take that boy's leg off”—this being the first **intimation** that I had had that anybody was hurt. On **inquiry** I learned that Mrs. Stratton's little boy Oliver (I think that is his name) aged some 5 or 6 years had been crushed in Billy Hale's [cotton] **gin**. On going over I found the little fellow in great agony, the house full of crying women and an **amputation** required sure enough. [Dr.] Dunavent having “got” the patient did the cutting. I **chloroformed** and [Dr.] Steele assisted generally. A very clumsy and awkward stump is the result.

Saturday November 10, 1877

Got up tired and worn out, having had but two hours rest during the night. It was 2 ½ o'clock before the Baker under me got through baking, and as a **consequence** I got no sleep . . . Today has been a busy day with me – the busiest in a long time—though there has been very little money in it. Oscar Stratton is doing remarkably well. Mattie Burns who yesterday seemed the very picture of health, was quite ill this morning. The symptoms were very obscure but the little thing evidently was suffering much. Gave **Verat Viride** in ½ drop doses and this evening she seem much easier.

Tuesday November 13, 1877

Weather clear and bright. Oscar Stratton doing very well. Cut out the **sutures** today and put on straps of adhesive plaster. No fever, no **septicemia**, the wound would have health by “first intention” had it been possible keep the little fellow quiet.

Tuesday November 20, 1877

Oscar Stratton is slowly improving. The last **ligature** came away today and the wound seems to be healing finely. The **santonine** and **calomel** administered night before last

brought away an enormous quantity of worms. Mattie Burns seemed very much improved this morning, but from Burns' account this evening, she is evidently not yet out of danger.

Wednesday November 21, 1877

Another **blustering** rainy night succeeded by a cold rainy day—as gloomy a 24 hours as I remember to have experienced in years. Business somewhat slacked off today, and most of my patients are **convalescent**. Mattie Burns is doing very well—so is Oscar Stratton. Poor little fellow! We commenced to slacken up the use of **narcotic** (chloral)—or rather **hypnotic**, day before yesterday and yesterday his mind was perfectly clear. He only then, for the first time, commenced to realize the great loss that he has sustained. Today he was calm and submitted to dressing without a struggle.

Vocabulary

The Work of an Arkansas Country Doctor in the 19th Century

Amputation: the removal of a body extremity by trauma, prolonged constriction, or surgery.

Blustering: (of a storm, wind, or rain) blow or beat fiercely and noisily.

Calomel: a white powder used as a purgative and a fungicide.

Chloroformed: render (someone) unconscious with chloroform

Chloroform: a colorless, volatile, sweet-smelling liquid used as a solvent and formerly as a general anesthetic.

Consequence: a result or effect of an action or condition.

Convalescent: a person who is recovering after an illness or operation.

Cotton Gin: a machine for separating cotton from its seeds.

Gloomy: dark or poorly lit, especially so as to appear depressing or frightening.

Homeopathic: Homeopathy, or homeopathic medicine, is a medical philosophy and practice based on the idea that the body has the ability to heal itself.

Hypnotic: a sleep-inducing drug.

Intimation: an indication or hint.

Inquiry: an act of asking for information.

Ligature: a thing used for tying or binding something tightly.

Medicinally: Of, relating to, or having the properties of medicine.

Narcotic: A drug that relieves pain and induces drowsiness, stupor, or insensibility.

Santonine: The tincture or extract obtained from the seeds of the plant called southernwood, popularly known as the tasteless worm medicine, and known in pharmacy as wormseed.

Septicemia: blood poisoning, especially that caused by bacteria or their toxins

Sutures: a stitch or row of stitches holding together the edges of a wound or surgical incision.

Verat Viride: a **homeopathic** remedy that was supposed to suppress inflammation

“Young Doctor on Horseback”

(Primary Source #2)

Introduction:

The following selection comes from a book titled Back Roads and Bicarbonate: The Autobiography of an Arkansas Country Doctor by E.H. Abington. Dr. Abington was born in 1873. He attended medical school in Little Rock in the 1890s, and spent most of his career working in the area around Beebe, Arkansas. This selection, written in the 1950s, explains what the practice of medicine was like during the late 19th century.

From “Young Doctor on Horseback”

Today the practice of medicine is very different from what it was fifty or sixty years ago. In those days, there was a doctor available in every community ready to answer calls day or night. He furnished the medicine that he prescribed. There was only one charge. This fact, and the competition among the many doctors, kept prices on a “live and let live” basis.

In those days, there were hospitals only in the large cities. The roads and methods of transportation were so poor that a sick patient could not be transported very many miles. The neighbors nursed the sick, sometimes doing a very good job, other times doing a very poor job. There was no such thing as a trained nurse or a paved road. The patient had to be transported in a two-horse wagon or buggy. Where the roads were bad, you could travel only about four miles per hour. Where the roads were good, about eight miles per hour.

In case of serious sickness, we had **consultations**. The doctor or the family could request a consultation. Sometimes one and sometimes as many as three doctors would be called in. The doctors would examine the patient thoroughly and go over the history of the case. The doctors would then retire to some private place, go over treatment and consider **diagnosis**, and frequently make a **prognosis**. The report to the family was always the same—diagnosis correct, treatment the very best. If the doctors thought best, they would agree on a new diagnosis and different treatment for the patient. This change could ordinarily be made without the family finding out.

In those days, we had no specific remedies as we have now. **Vaccination** for smallpox was already prevalent, and about the time the present treatment for diphtheria was discovered.

For many years after I began to practice, we did not have the benefit of the X ray or cardiograph, nor did we have technicians to help us make diagnoses. We had specialists in a very few fields—surgery and ear, eye, nose, and throat were the principals ones. Of course we made many mistakes in diagnosis in those days, we are still making them.

Vocabulary

Consultation: the action or process of formally consulting or discussing.

Diagnosis: the identification of the nature of an illness or other problem by examination of the symptoms.

Prognosis: a forecast of the likely course of a disease or ailment.

Vaccination: the act or practice of vaccinating; inoculation with vaccine.

The Work of an Arkansas Country Doctor in the early 20th Century

(Primary Source #3)

Introduction

During the early 20th century doctors in rural parts of Arkansas had very different jobs from doctors working in cities or in a hospital. Well into the 20th century, rural doctors often made house calls on their patients. Today, it is very rare to find a doctor who will come to a patient's home. One doctor who spent his career making house calls was T.E. Rhine, of Thornton, Arkansas. Dr. Rhine spent over 60 years practicing medicine. He delivered 7,000 babies during his career, and was highly respected all over the state. The following excerpts come from a book call *T.E. Rhine, M.D.: Recollections of a Country Doctor*, written by Dr. Rhine's daughter, Pat Rhine Brown.

Anne Bradley Claye (Houston, Texas)

Dr. Rhine discovered **polio** in one of my twins. He recommended that we get her to the hospital at once. We had to wait until the next day. We took her to Little Rock. She was fourteen months old at the time, but she's walking now and doing fine, thanks to him. This was in 1942, about the time polio was just beginning to be recognized. There were nurses at the hospital from Minneapolis who were trained. And he sent her *immediately*.

The reason for it was that Papa was reading the paper that morning about a child with polio, and he said, "I wonder if that baby has what is going around." I heard him, and something just struck me. In a few minutes Cliff walked in and said, "Did you hear what Daddy said?"

"Yes. Do you suppose she might have that?" She was ill at that time with high fever, not ever having tried to walk. "Let's call Dr. Rhine."

We took her right on to Dr. Rhine and he made that discovery right then. I know that is why she didn't come out of it badly crippled . . . I will be eternally grateful to Dr. Rhine for that – eternally grateful.

Claye's cousin, Lucille Brantley Coleman, it was time for her to deliver, so they called for Dr. Rhine. Several of us were in the room after the baby came. Dr. Rhine came in with the baby and asked, "Who in here has had children?"

I said, "I've had twins."

"Here, take this baby and clean it up for me."

"Oh, my God!" I had the oil and a cotton swab, and I was wiping the baby gently.

In the meantime, Dr. Rhine had gotten the mother comfortable, come back in, and I wasn't through wiping the baby, scared I would hurt the baby. He saw me. "Hand it here." He took the oil and put some in his hand, rubbed it all over that baby, wiped it off, wrapped it up and laid that baby by the mother. I said, "Oh, I'll never tell anyone else I had twins again."

He was a wonderful doctor, wonderful. I'll never forget him. You could feel how Dr. Rhine felt about people. Call it **vibes!**

Vocabulary

Polio: An infectious viral disease that affects the central nervous system and can cause temporary or permanent paralysis.

Vibes: A person's emotional state or the atmosphere of a place as communicated to and felt by others.

Alpha Barner Walton (Fordyce, Arkansas)

There were not heaters in cars in the early days, and Dr. Rhine would heat bricks and put in a bucket and set down by him in the car to keep his feet and hands warm. He never knew what was going to happen, and he had an ax, a lantern and everything he thought he might need because the roads were so bad.

He had these bricks in the car; it was cold, and they called him to come see this colored woman who had triplets. She didn't have a thing in the world. He got the bricks out of his car and warmed them in the fire and wrapped them and put them between those babies to keep them warm. He came back by our house, and he said, "I've made my first **incubator**. I dared 'em to let those brick get cold, and I dared 'em to burn those babies. We've got to have something to put on them." So Mama and I tore up every old sheet and flour sack and anything we had and made diapers and something to wrap 'em up in. He gathered up things and took over to them, and they grew like anything. It was ten miles up in the country from where we lived in Ramsey. I expect it was fifteen or twenty miles from Thornton, way out in the woods. And he had to walk part of the way. He couldn't get there in the car.

When he knew there was something wrong with you, he didn't wait for you to call him. If he was in the community, he'd stop by. That is what my mama liked about him. She'd save up all of her complaints, and when he'd come by she'd tell him about them, and they all got fixed. She knew the he would be passing by every few days.

I knew one family that lived in our community that had seven children. Dr. Rhine delivered every one of them. He would come by and get Mama to go help him deliver them. He'd say, "We aren't going to get any money out of this, because I never have. But I've got to take care of this woman."

If you were sick, Dr. Rhine really was going to be with you. He would come to your house and stay all night. You'd fix him a bed, if he thought that patient needed him, and he'd stay the night.

Vocabulary

Incubator: an enclosed apparatus providing a controlled environment for the care and protection of premature or unusually small babies.

A Day in the Life of a 21st Century Doctor

(Primary Source #4)

Introduction:

The following selection comes from U.S. News & World Report's Education Blog, published in 2011 by Veritas Prep. It follows the daily life of a pediatrician named Heather MacAdam, who works in a small community hospital in Florida. The following excerpt details a typical work day for Dr. MacAdam.

Below, in MacAdam's own words, is her typical timeline:

6:00 a.m. — Alarm rings—hit snooze. Today I have nursery rounds, so I slap on some scrubs and head out the door to the hospital. I gave up wearing nice clothes to work after being vomited on one too many times during training.

7:00 a.m. — Newborn nursery rounds. The nurses line the babies up one by one to be seen. Nothing wakes you up like a line of screeching babies waiting for you. After checking their weight and vital signs, I wheel them back to their mothers and offer advice and congratulations.

8:00 a.m. — Head to the practice. Today is fully booked—as I walk in, I notice a waiting room full of playing children and can't help but wonder what germs they might be passing to each other.

8:00 a.m.–12:00 p.m. — Pediatric appointments. The clinic schedules each child for a 15-minute appointment—regardless of the complexity of the problem. As usual, I'm running 30 minutes behind, trying to catch up with the inevitable and unplanned surprises that pop up. The new electronic medical records we are using are nice for some things, but it takes me twice as long to document a visit.

12:30 p.m. — Lunch, if you can call it that. Today it's shoveling a protein bar in one hand while catching up on notes with the other.

1:00–5:00 p.m. — Afternoon clinic appointments. There are usually more "same day" appointments in the afternoon that are reserved for urgent cases. Today I have a depressed teenager, a 9-year-old who appears to have attention deficit hyperactivity disorder, and a bunch of kids with coughs, colds, and bronchiolitis. I have one sad case toward the end of the day where a mother expresses concern her 9-year-old daughter with Down syndrome is being abused by her biological father. I end the day filing a report with the state.

5:00–7:00 p.m. — Follow-ups. Even though the appointments are done, messages, lab results, X-rays, and prescription refill requests pile up during the day and need to be completed. This is a critical component for a successful primary care practice, but it is not reimbursed.

7:00 p.m. — Leave clinic. I'm on hospital call tonight, so I need to keep my pager on. I watch some favorite TV shows and hope it's a quiet night.

8:15 p.m. — Beeper goes off. It's the labor and delivery floor calling about an urgent Caesarean section on a baby with a depressed heart rate. I get in the car and race to the operating room.

8:30 p.m. — Get to OR. As soon as I'm scrubbed in, the OB [obstetrician] hands me the newborn. The baby required resuscitation, and the next several hours are spent arranging for transfer to the nearest newborn ICU [intensive care unit].

11:45 p.m. — Home. Hope to finish some TV time from my DVR while searching for articles relating to the patients I saw earlier today. Crossing my fingers for a quiet call night—need to rest up to get up at 6:00 a.m. to do it all over again. Pediatrics is a very rewarding career for me, but it can be exhausting.