The Immortal Life of Henrietta Lacks Study Guide

The Immortal Life of Henrietta Lacks by Rebecca Skloot

Contents

Summary

“The Immortal Life of Henrietta Lacks” by Rebecca Skloot is the story of a poor black woman who was raised in the South. Throughout her childhood and adult life, she worked from sunrise to sunset on a tobacco farm. Henrietta’s mother died when she was only four, and life got rougher than it had already been. There were nine kids in the family, and they were just too much for her father to handle. So, he split them up among several relatives. Henrietta was sent to live with her paternal grandfather, Tommy Lacks. Tommy was raising other grandchildren, including David Lacks who was five years older than Henrietta.

David and Henrietta shared the same bed. As the children matured, they became sexually involved. Henrietta became pregnant with her first child at just fourteen. She had several more children before she and David married when she was twenty. Henrietta stayed with David, but he was a less than a stellar partner. He drank and caroused with other women and brought diseases home to her like syphilis and gonorrhea. The family moved to Baltimore when David had a chance to work at a steel mill and earn more money than he did on a tobacco farm.

When Henrietta was thirty, she felt what she called a “knot” in her lower torso. She saw a doctor at Johns Hopkins University when she began to feel discomfort from the “knot.” She was eventually diagnosed with cervical cancer. Johns Hopkins doctors took samples of her cancerous cervix to study in the lab. The doctors felt they had a right to take samples from public wards who were treated without charge. Taking their tissue was a form of payment. Most cultured cells only lasted a few days and then died off. When Henrietta’s samples arrived, the lab technician who was assigned to work with them figured her samples would be no different than the many others she had monitored.

But, to the lab tech’s great surprise, the new cells she just received doubled overnight. She separated the culture into two parts and placed each in a separate container. By the next day they had doubled and had consumed all the space that she had allowed for them. The lab director, George Gey, was amazed just as the world of medical scientific research would be one day.

Over the years, Henrietta’s cells became known as the HeLa cells. They were distributed to labs all over the world. Their reproduction was unlimited. Henrietta Lacks had become immortal through her diseased cancerous cells. Many medical advancements were made using the HeLa cells. Literally hundreds of thousands of tests were conducted using them. However, they were so strong and robust that they were suspected of contaminating other cultures. Millions of dollars were made by private companies on the sale of HeLa cells.

Henrietta died a few months after the cells were taken from her. She never knew that her cells had been taken and that they, in a sense, had made her immortal. Her family didn’t realize how Henrietta’s cells had been used until twenty years after Henrietta’s death. While private labs were making millions on her cells, her family remained poverty stricken and without health insurance.

Henrietta’s “immortality” led to many achievements in medical research, but it also led to more restrictions of the use of the cells and tissues of patients. After the exploitation of the HeLa cells, research standards and restrictions were instituted, including the “informed consent” clause. This clause states that patients must be informed of a doctor’s or lab’s intentions relative to the use of your tissue, blood, or cells.

Part One: Life – Chapters 1 - 5

Summary

Chapter 1: The Exam… 1951

While her husband David Lacks and three of his children waited in the car, Henrietta Lacks rushed into Johns Hopkins Hospital to the gynecology clinic. She had a “knot” on her womb that the doctors needed to look at. She had felt a strange sensation, a “knot” she called it, in her womb for a long time. It hurt especially during sex with her husband. When Henrietta became pregnant with her fifth child a short time later, her friends told her the “knot” was her baby. Still Henrietta knew it was something else; but, she was afraid to see a doctor. She thought they’d take her womb and she wouldn’t be able to have more children. After giving birth to Joseph, she began bleeding and could feel the knot when she examined herself. Her local doctor thought it was a sore from syphilis, but it tested negative. He advised her to go to Johns Hopkins.

Located in Baltimore, Johns Hopkins was one of the top hospitals in the nation. Many hospitals didn’t treat African-Americans at the time. However, Johns Hopkins had a black ward. Howard Jones, the gynecologist on duty, examined Henrietta. Jones flipped through Henrietta’s records, which showed that she had bouts with syphilis and gonorrhea and had cancelled many follow-up appointments. Henrietta never felt comfortable at Johns Hopkins. She was a tobacco farmer who knew how to butcher pigs. She was in an alien world at the hospital. She was nearly illiterate. Like most black Johns Hopkins patients, she only came to the hospital because she had no choice.

Jones found the lump and took a biopsy and sent it to the pathology lab. Henrietta gave birth to Joseph at the hospital but the doctors somehow missed the lump.

Chapter 2: Clover… 1920 – 1942

Henrietta Lacks was born on August 1, 1920, in Roanoke, Virginia. Her birth name was Loretta Pleasant. Henrietta lived with her parents and eight other siblings. Her mother died giving birth to a tenth child. After her mother died, tending to nine children was too much for her father. He took them to Clover where the family had been tobacco farmers since the days of slavery. He divided the kids up among several relatives. Henrietta wound up with Tommy Lacks, her grandfather. Tommy was already raising another grandchild, David Lacks, who she would eventually marry.

Henrietta and David worked hard in the fields and tending to the livestock. They planted tobacco behind mule-drawn plows in the fall and pulled the grown plants up in the spring. Henrietta attended a colored school. David dropped out in the fourth grade. The cousins spent hours together at the swimming hole in the summer. Tommy piled tobacco leaves in his horse-drawn wagon, made Henrietta and David lie on top of the leaves to protect them and went to the town of South Boston to sell them at the auction.

The children were exposed to nights of boozing, gambling and prostitution at the marketplace.

Henrietta and her cousins would find work with white tobacco farmers – planting and harvesting their crops. They'd earn enough to go to the movie theater where they would sit in the colored section. As the children matured into teenagers, other interests began to grow. Crazy Joe Grinnan, another cousin, tried to kill himself over Henrietta when she refused to date him. He jumped into a frozen pond and refused to come out until she agreed to go out with him. They dated for a while but Henrietta and David had been sharing a room since she was four and he was nine. They started having children together when Henrietta was fourteen. Her first born was Lawrence. Her second born, Elsie, was mentally disabled. Crazy Joe tried to stab himself to death when he learned that Henrietta and David were marrying. Her sister, Gladys, urged her not to marry David Lacks – she could do better.

Henrietta married David in April of 1941. She was twenty and David was twenty-five. They struggled to make ends meet in their marriage. Another cousin, Fred Garret, had left the farm to work at Bethlehem Steel at Sparrows Point just outside Baltimore. With the onset of World War II, demand for steel soared. Jobs were plentiful. Black employees generally got the dirty jobs but were paid well in comparison to what they earned as farm workers. Fred boasted to David that he was making eighty cents an hour. Henrietta stayed behind while David traveled to Baltimore. He got a job at the steel mill and a few months later Henrietta and their two children joined him. It was to be a brand new way of life for Henrietta and her family in a small black community called Turner Station.

Chapter 3: Diagnosis and Treatment… 1951

Henrietta's biopsy results show that she had, "Epidermoid carcinoma of the cervix, Stage I." She had cancer. Dr. Jones and his boss, Dr. Richard Wesley TeLinde, were participating in a national debate over what could actually be considered "cervical cancer" and the best treatment for it. TeLinde was one of the country's top experts in the disease. At that time, most doctors believed that invasive cervical cancer was deadly but that the non-invasive variety was not. It was thought that non-invasive cervical cancer, also referred to as carcinoma in situ, did not spread. But TeLinde believed that it did spread and once it did, it became deadly. As a result, he advocated radical surgery which reduced the rate of deaths from the disease. But many doctors felt his approach was extreme and unnecessary.

TeLinde was dedicated to educating doctors on the two types of cervical cancer and reducing hysterectomies by verifying biopsies prior to surgery. But many in the medical field didn't ascribe to TeLinde's theories which made him work all the harder to prove that he was right. Like many of his contemporaries, TeLinde used patients from public wards for research – often without their knowledge. It was the consensus of the medical field at the time that since these patients were receiving free medical treatment it was fair to use them for research.

In their study, TeLinde and Jones proved that TeLinde's theory was correct. Sixty-two percent of women with invasive cervical cancer were first diagnosed with carcinoma in situ. TeLinde decided that if he could grow living cells from normal cells, invasive carcinoma cells and non-invasive carcinoma cells; comparing the cells and demonstrating that the invasive and non-invasive cancer cells behaved the same, he would silence his critics. TeLinde contacted George Gey, head of tissue culture research at Johns Hopkins. Gey and his wife, Margaret, had worked for decades trying to grow cancer cells outside the body in an effort to find a cure. But most cancer cells didn't live long and those that did didn't thrive. They "were determined to grow the first immortal human cells."

Gey jumped at the chance when TeLinde offered him cervical cancer tissue to grow. Gey took tissue from every available public patient including Henrietta.

When Henrietta returned for treatment, she signed a release form giving the hospital permission to treat her. During surgery it was determined that Henrietta had invasive cervical cancer. The treatment for this type of cancer at the time was radium. The doctor who administered the radium to the unconscious Henrietta scraped off some tissue from the tumor for TeLinde. When the cells arrived at Gey's lab, the techs were unimpressed. They were sure these cells would die like all the others.

Chapter 4: The Birth of HeLa… 1951

When lab assistant Mary Kubicek was eating her lunch in a room lined with research animals on one wall, Gey walked in carrying pieces of Henrietta's cervix. Mary figured it was a waste of time. Most cells died in the research lab because no one knew exactly what nourishment the cells needed to survive. There was a lot of guesswork but no one had figured out the right formula. Gey even took to extracting blood from live chickens. The biggest problem preventing success was contamination of the cells. Margaret had been a nurse and stressed a sterile lab which was one of the reasons they had any success at all.

Mary approached her new sample in a clean white surgical gown and mask which complied with Margaret's strict protocol. Mary sterilized the small cubicle she worked in and the equipment she would be using on Henrietta's sample. Only then did she pick up Henrietta's tissue and begin the process of growing cultures from it.

George Gey came from a poor family and had to work his way through college and graduate school. It took him longer than average to get through med school because he had to quit school a few times to work and save money to continue his education. After graduation, George and Margaret built their first lab in the janitor's room of Johns Hopkins. George was a visionary and full of ideas. He had multiple projects going all at once. One of his projects was developing a roller-tube culturing technique. The wood drum in the roller turned twenty-four hours a day. Gey felt it was essential for the culture medium to stay in motion – like a living organism. After Mary sliced off samples from Henrietta's tissue, she placed them in the roller-tube and watched as they began rotating.

Henrietta remained in the hospital two days. When she was released, records indicate that she was experiencing no pain and that she felt well. She was told to return in two and a half weeks for a second treatment. Mary monitored Henrietta's cells and saw that they had begun to grow. But Mary wasn't impressed. All cells grew initially but then died off. But within a day, Henrietta's cells had doubled and were growing like wildfire. Mary had to divide them each day to give them room to grow. Each day she found that all the groups of cells were doubling. The cells would grow and cover the amount of space Mary gave them.

Gey was cautious. He knew they could all die at any time. But Gey was surprised. The cells kept growing, doubling every twenty-four hours. They were accumulating by the millions. Henrietta's normal cells died off after a few days. But the cancer cells continued to grow as long as Mary gave them nourishment and warmth. George was telling colleagues that he was growing immortal cells.

Chapter 5: "Blackness Be Spreadin' All Inside"… 1951

Henrietta returned to life as usual not aware of the monumental advances being made by her cells. She was sometimes nauseated by her radium treatments but kept on working – at her Baltimore home and back in Clover in the tobacco field where she would spend many weekends there with her children. Henrietta and her friend Sadie would sneak out to go dancing when David was on the night shift. To Sadie, Henrietta was a lot of fun and a great friend. Ethel, Galen's wife, however detested Henrietta because her husband had a crush on her. On the nights they stayed home, they would play games with the kids. Henrietta's oldest child, Lawrence, was sixteen. Her daughter, Elsie had never learned to talk and would often run off into the field chasing wild turkeys or run through the streets screaming. She was accident prone and often hurt herself. Henrietta took Elsie to revival meetings in hopes that a laying on of the hands would cure her. She was too big for Henrietta to handle and was placed in a state hospital for the insane. Sending Elsie away hurt Henrietta who visited her once each week.

Henrietta didn't tell anyone about the cancer. The treatments seemed to be working. The doctors were pleased with the progress. The tumor was shrinking. When daily x-ray treatments began, she had to tell her cousins and friends about her condition. But Henrietta downplayed the seriousness of her disease and assured everyone that she was fine. But after she began what were to be final radiation treatments, she began to bleed profusely. After further treatments, the bleeding stopped and she seemed fine. She was surprised to learn that the radiation had made her infertile. Records indicated that she had been told before she began treatment. But Henrietta said she wouldn't have agreed to them had she been told that it would end her child-bearing years.

Henrietta fell ill a short-time later. She experienced painful urination and strange discharges. She was diagnosed with acute gonorrhea. Sadie was shocked when she saw that Henrietta's torso had been burned black. Henrietta felt the "blackness was spreading all inside" her.

Analysis

Chapter 1

Henrietta was a young married woman with four children when she discovered a knot in her stomach. The lump was tested and determined to be malignant. Henrietta was treated in the public ward of Johns Hopkins University. Doctors and scientists felt that it was appropriate to take the cells of public ward patients since they didn't pay for their treatment. If Henrietta had been a paying patient, the discovery of her "immortal" cells would not have happened.

Chapter 2

Henrietta experienced a difficult childhood. Her mother died when she was four. Their father couldn't care for her and her eight siblings and they were split up between several relatives. She was sent to live with her grandfather, Tommy Lacks, who was also raising another grandchild, David. Young Henrietta had a hard life – working on a tobacco farm from sunrise to sunset. Although first cousins, Henrietta and Tommy became sexually involved and Henrietta was pregnant at fourteen. Had Henrietta's mother lived, she would have had a better life and not have wound up with David who she later married. He caroused with other women and infected her with both syphilis and gonorrhea which doctors suspected led to her cervical cancer which led to the eventuality of her immortal cancer cells.

Chapter 3

There is a lingering question about Henrietta's treatment that will never be answered. It was learned long after Henrietta died, that there was a misdiagnosis about the type of cervical cancer she had. Many experts claimed that it didn't matter; that she would have received the same treatment for the cancer she actually had and the cancer she was diagnosed with having. Other experts in the field thought Dr. TeLinde's treatment approach was radical and extreme. TeLinde's interest in the different types of cervical cancer led him to suggest that George Gey who ran the tissue lab test cells from patients with cancer of the cervix. Henrietta's tissue samples were taken for this purpose.

Chapter 4

When lab assistant Mary Kubicek was assigned to culture and monitor a new cell line, she was uninspired. They all died after a few days. But Mary and her boss, George Gey, knew they were dealing with cells that had never before been seen in a lab. The cells not only grew but they flourished. They doubled overnight. They grew to the full capacity of whatever space they were given. Gey knew he had cells that were unusual, robust and ultimately immortal.

Chapter 5

As was common in the early 1950s, Henrietta kept her condition secret from her family and friends. Perhaps, it was due in part to her difficult childhood and racial bias. Henrietta didn’t feel worthy of sharing her problem with others. The question as to whether she was receiving extreme radical treatment for her cancer surfaced when she finally showed a friend her midsection that had been charred black from the radiation.

Vocabulary

cervix, syphilis, asymptomatic, gonorrhea, palpated, pathology, idyllic, estrogen, endometriosis, hysterectomies, dearth, indigent, carcinoma, radium, meticulously, umbilical, visionary

Part One: Life - Chapters 6 - 11

Summary

Chapter 6: “Lady’s on the Phone”… 1999

Eleven years after author Rebecca Skloot learned about Henrietta in a classroom, she discovered some scientific papers entitled, “The HeLa Cancer Control Symposium” at Morehouse School of Medicine in Atlanta. The school was one of the oldest black universities in the country. She contacted Roland Pattillo, a professor of gynecology at Morehouse. He had been a student of George Gey.

Pattillo knew how to contact Henrietta’s family but grilled Rebecca about her intentions. They were very sensitive about Henrietta’s experience. Rebecca provided him with documentation about her dedication to investigating questionable medical incidents involving black people and dubious research. She was white, but she cared about what she considered victims of research no matter what their color. She convinced Pattillo that she had no nefarious intentions about Henrietta’s story and began sharing information about Henrietta’s family. Elsie was an epileptic and died shortly after Henrietta’s death. Deborah was Henrietta’s only living daughter. Pattillo gave Rebecca’s phone number.

Deborah was very hard of hearing and had difficulty understanding who Rebecca was and why she was calling. Finally, Rebecca was able to get across to Deborah that she was writing a book about Henrietta’s cells. Deborah was thrilled that somebody was finally going to tell Henrietta’s story. Deborah filled Rebecca in on many details of her mother’s and family’s life from the 1920s to the 1990s. She mentioned that some man had stolen her mother’s medical records and autopsy from Johns Hopkins. The man had been sent to prisoner for fifteen years. The man claimed that the hospital had killed Henrietta. She also mentioned that her brother had murdered someone. She made a reference for “the Hospital for Crazy Negroes.” Deborah had suffered a great deal of stress over the years and didn’t trust anyone. She wanted to learn more about her mother and about her cells.

She was monotone and unenthusiastic the next time that she called Deborah. She couldn’t answer any more questions. Her brothers told her she needed to write her own book. She did give Rebecca the phone numbers of some of her relatives. She tried to call Deborah and her relatives repeatedly, but no one would talk to her. Once she got David on the phone. He told her to interview Henrietta’s cells.

Chapter 7: The Death and Life of Cell Culture… 1951

Three weeks after Henrietta started radiation treatments, George Gey appeared on a television program about conquering cancer. He talking about cells in general and that it was a mystery why normal cells turn cancerous. He displayed a bottle that contained a massive number of Henrietta’s cancer cells explaining that the cells may help find a cancer cure.

In hopes of finding that cure, Gey began sending out cell samples to any scientist who wanted to use them for research. He sent Henrietta’s cells all over the world from Texas to India and every place in between. He readily offered visitors to his labs samples that were always available. The value of these cells was that researchers could conduct research on them that was impossible to do on a living person. The cells were used in extensive cancer research around the world. No one worried about destroying the cells. There was an endless supply if they were destroyed. There was no coverage in the news about this research. Gey failed to mention Henrietta during his television appearance.

The public had grown dubious about a cancer cure. In 1912, Alexis Carrel, A French surgeon at the Rockefeller Institute, grew an “immortal chicken heart.” Carrel wanted to prove that those scientists who didn’t believe it was possible to keep tissue alive outside the body were wrong. He performed many experiments including one in which a sliver of a chicken’s heart kept beating as if it were in the chicken’s body. He won the Nobel Prize for another technique he developed. Stories about him always included the “immortal chicken heart” experiment.

Carrel’s goal was to develop organ transplants and life extension as ways to preserve the “superior white race.” He advocated the sterilization of what he considered inferior, non-white races. He was a fan of Hitler. He had other eccentricities. Since he believed that cells could be killed by light, he made his technicians work in a lab room that had black-painted walls. They had to wear black, hooded lab garb. He authored a book entitled, “Man the Unknown” in which he proposed amending the constitution to eliminate the idea that there be equality for all people. To him, people were not at all equal. He would wish his chicken cells happy birthday every year and promised amazing things from them. He made wild claims about the cells suggesting that they “would reach a volume greater than that of the solar system.”

In truth, the original chicken cells didn’t last very long. It was determined that Carrel was inserting new chicken cells into the culture and was duping the public. Henrietta’s cancer cells began growing in earnest five years after Carrel’s chicken cell cultures were destroyed.

Chapter 8: “A Miserable Specimen”… 1951

Henrietta told her doctors in early June 1951 that she thought her cancer was spreading. She could feel it. But, they found nothing and reported that there was no evidence of recurrence. In those days, patients rarely questioned their doctors – especially black patients in public wards. Discrimination was widespread. Blacks were lucky that they were getting treated at all. There’s no evidence that Henrietta was treated any differently than a white woman with the same disease. However, it was commonly held that black people were hospitalized at later stages of their illnesses and that they weren’t given the same amount of pain medication as white patients.

Henrietta came back a few weeks later and complained of pain on both sides. Still, the report was that there was no evidence of recurrence. Just two weeks after that, she could barely urinate and had trouble walking due to the pain. After going back and forth a few more times, it was determined that she had an inoperable tumor. Although only a handful of friends and relatives knew about her disease initially, everyone knew how sick she was. People could hear her wailing in pain and asking the Lord to take her. X-rays showed that tumors were everywhere. The only thing that could be done for her was controlling her pain.

Doctors treated her with radiation in an attempt to reduce the size of her tumors and thus ease her pain. On August 8th, one week after her 31st birthday, Henrietta was hospitalized. A doctor snipped off more cancerous cells for Gey who wanted to see if the second batch would grow as rapidly as those from the first snipping. These cells did not survive past a few days. Doctors tried their best to relieve her pain but nothing eased it for long as new tumors appeared each day. There is no record that Gey visited Henrietta on her death bed, but a colleague of Gey's claimed he did. He allegedly leaned over Henrietta in her death bed and whispered that her cells would make her immortal. Her cells would save the lives of others. She responded that she was glad her pain would help others.

Chapter 9: Turner Station... 1999

After repeated calls and pages, Rebecca was finally able to meet with David. He called Pattillo to ask about Rebecca before he agreed to meet with her. She met David, Jr., who took her to Lawrence's house where she met with David. After paging David, Jr., repeatedly with no response, Rebecca decided to drive out to Turner Station herself. The town which had been well-populated in the fifties had been diminished at the end of the war. By the time Rebecca visited, there were only around one-thousand residents and falling.

Rebecca looked for Speed's Grocery. Courtney Speed, a local woman who owned the grocery store, had devoted one of her buildings for a museum in Henrietta's honor. Rebecca found the New Shiloh Baptist Church where plans were being made for the museum; but, it was closed. While peeking into the church, the preacher drove up in a black Lincoln Town Car. He had never heard of Henrietta, but he knew the location of Speed's Grocery.

Courtney Speed was glad to see Rebecca. When Rebecca began asking about Henrietta, Courtney asked if she had talked to Mr. Cofield. Since Rebecca hadn't talked to him, Courtney wanted to know how she knew about her. Rebecca explained that her name had been mentioned in a newspaper article. She had tried to talk to the family explaining that Sonny had failed to meet her. Courtney wouldn't talk to her until she had the family's permission. But, she did take her to the library where Courtney picked up a video tape. Then, they drove to a beauty salon that Courtney owned. Courtney led Rebecca to a chair in the back where she played the video for her. It was a one-hour British documentary about Henrietta entitled, "The Way of All Flesh." Rebecca knew of the documentary and had been trying to get a copy. A voice came on telling Henrietta's story and how her cells might hold the secret of conquering cancer. The final scene of the documentary was of Clover where Henrietta was buried in an unmarked grave. Rebecca decided to try to meet with Henrietta's relatives in Clover before she tried meeting with her husband and children again.

Chapter 10: The Other Side of the Tracks… 1999

Rebecca drove to Clover otherwise known as "Lacks Town." The population had declined to fewer than 200 when Rebecca traveled there. A man directed Rebecca to drive beyond the train tracks when she asked where Lacks Town was. On one side of the tracks were nice homes with well-kept lawns. On the Lacks Town side were one-room shacks with tall weeds in the front yard. Lacks Town was a single road about a mile long. Slave-era cabins were still standing. An elderly man asked Rebecca if she was lost. As it turned out, the man was Cootie, Henrietta's first cousin. He told her that everyone in Lacks Town was related to Henrietta. She'd been gone such a long time that everything about her was dead except the cells.

Cootie invited Rebecca into his small home-made house. They sat in his dark living room and drank red wine. He brought out some papers that he had on Henrietta. He said he was able to sell them sometimes. He found an article that had been in the Rolling Stone about her. There was a picture of her with the article.

Cootie had heard that if all the cells that existed from her were brought together, they would weigh over 800 pounds. No one in Lacks Town understood how she could be dead while her cells continued to live. Cootie had been stricken with polio as a youngster. He figured she wanted to fix him with her cells. Some people thought voodoo was involved – that the disease was conjured up by doctors or others. He claimed that there were spirits that visited Lacks Town and brought to disease to the unsuspecting. He himself saw the spirit of a two-ton headless hog roaming the streets of Lacks Town. He didn't know if a spirit gave Henrietta the cancer or a doctor did. But, he did know that regular cancer cells didn't keep growing after the person died.

Chapter 11: "The Devil of Pain Itself"… 1951

By September, Henrietta's body was consumed by tumors; they were everywhere – lungs, bladder, diaphragm. Her stomach swelled like she was pregnant. They gave her so much blood that transfusions were stopped temporarily until the blood supply could be replenished. Emmett, a cousin whom she had been kind to over the years, dropped everything when he heard she needed blood donations. He brought his brother and six friends with him. He told Henrietta that they had come to make her well. She suddenly went into a pain spasm like "she'd been possessed by the devil." After Emmett and his friends left, the doctor injected Henrietta with a large dose of morphine. He left instructions that she was to receive only pain medication. Some of Henrietta's last words to her sister Gladys were to make sure David took care of the kids, especially Deborah who was only one. Henrietta died on October 4, 1951.

Analysis

Chapter 6

After author Rebecca Skloot became interested in Henrietta's story she had no idea how difficult it would be to win the trust of Henrietta's family. They had been kept in the dark, lied to, ignored and mistreated by the medical research field for years. They didn't trust anyone, especially white people. Rebecca didn't give up because she believed in the story. She wasn't even deterred when David told her on the phone to go interview Henrietta's cells.

Chapter 7

Before Henrietta's cells surfaced as the first truly "immortal" cells – cells that continued to reproduce and thrive and never die, Alexis Carrel, a French doctor in 1912 claimed that he had created living cells from a chicken's heart. The cells thrived outside the chicken's body and even "beat" like a heart. Carrel won the Nobel Prize in Medicine. However, it was later revealed that the cell culture was a fraud and that Carrel was inserting new cells when others died off.

Chapter 8

The medical field let Henrietta down again. She came into the hospital repeatedly after her radium had supposedly cured her cervical cancer. She was sure that the cancer was spreading all inside her. Twice notations were made after examination that there were no signs of recurrence. But, Henrietta was right. When she finally underwent surgery, it was determined that her cancer was inoperable. It was just as Henrietta said – it had spread all over. Doctors were as concerned in getting more of her samples as they were about her treatment. Dr. Gey whispered that her cells would make her immortal even though she was dying.

Chapter 9

Rebecca continued to have problems meeting with the family. They were afraid and resentful. They had been ignored and mistreated for so long that it was difficult for them to believe that Rebecca's only goal was telling the truth. The lack of response from the family led Rebecca to retrace Henrietta's roots back to Lacks Town where she was able to learn more about Henrietta, the human being.

Chapter 10

Rebecca began to know Henrietta better when she visited her early roots. She saw the racially divided town where she lived. Henrietta was from the proverbial other side of the tracks. The insight that Rebecca gleaned from her trip to Lacks Town allowed her to write a book that was richer and deeper and human – way beyond a story about cultured cells.

Chapter 11

Henrietta died while experiencing unbearable pain. The tumors had attacked her organs and her stomach swelled like she was pregnant. Henrietta’s last words to her sister were to make sure that her children were taken care of.

Vocabulary

incoherently, metastasize, immune, suppression, eugenicist, messiah, elixir, benevolent, inoperable, feigned, melodramatic, diaphragm

Part Two: Death – Chapters 12 - 16

Summary

Chapter 12: The Storm… 1951

Word of Henrietta's death reached the Gey lab quickly. He asked for more tissue samples from every organ of her body. David was asked if they could perform an autopsy. He refused initially, but family members convinced him that he should. He agreed to a partial autopsy. Mary was present during the autopsy holding out her Petri dishes to collect samples from all her organs. There were tumors the size of baseballs. The official cause of death was uremic poisoning from the build-up of bodily toxins. Mary wanted to run out of there but kept her composure. She was most moved when she saw Henrietta's red painted toenails. It occurred to her that she had thought of Henrietta as all those pieces she'd been growing and monitoring. The red toenails told her that Henrietta was a real person.

A few days after the autopsy, Henrietta's body was moved from Baltimore to Clover. Sadie and her cousins dressed Henrietta and prepared her for viewing. Two male cousins dug her grave behind the house. The family held a wake over the next several days. Henrietta's casket was lowered into the grave by her cousins in pouring down rain. A severe storm blew up taking the roof off a barn and causing a fire in the tobacco field. Power lines were out and one of Henrietta's cousin's houses was torn out of the ground. Her cousin Peter said that Henrietta was trying to tell them something.

Chapter 13: The HeLa Factory… 1951-1953

Shortly after Henrietta died, plans were made for the HeLa factory that would produce trillions of cells each week for the purpose of curing polio. The early fifties were struck with a worldwide polio epidemic. The National Foundation for Infantile Paralysis which was created by President Franklin Roosevelt, a polio victim himself. The foundation organized the largest field trial in history to conduct testing on the vaccine. The cells used in these tests were from monkeys which was an expensive process. The foundation was looking for a less expensive way to accomplish their goal of mass-producing cells. The Gey lab was contacted for help. The lab stood the chance of gaining publicity for their working a making a tidy sum for their cells. It was easy to grow Henrietta's cells. They would grow to the capacity of the container they were placed in.

If the HeLa cells were susceptible to the polio virus, it could mass produce the necessary cells and the foundation would not need the monkey cells. Henrietta's cells proved to be more susceptible to the virus than most other cells. But Gey needed to find a new way to deliver them. Shipping by air was too expensive. Gey devised a way. He placed some of the cells in test tubes, packed them in ice and sent them through the post office. When the cells were placed in the incubator at their destination, they began to grow. The delivery system proved successful.

The foundation established a distribution center at Tuskegee Institute in Atlanta. Tuskegee was one of the most prestigious black colleges in the nation. It was chosen as the distribution center because it would provide funding to black scientists for research, jobs and training. An elaborate factory was built at Tuskegee where the HeLa cells were cultured by back scientists and technicians. They made sure the cultures were still alive when they were distributed around the country. Using Henrietta's cells, the scientists helped prove that the Salk vaccine was effective. Since there was a limitless number of cells, the lab began sending them out to any researcher who paid for them and the cost of their shipping. In spite of the cancer, the cells were susceptible to other diseases which made their use beneficial for many kinds of research. The cells were also useful in growing viruses like herpes, mumps and measles.

Henrietta's cells help foster the new field of virology. A group of researchers used her early cells to test a freezing process. The use of her cells also led to an important standardization of culturing techniques. This standardization process included three important steps: the mass-producing of HeLa cells; the development of the first standardized culture medium that could be made in mass quantities and shipped ready to use; and, thirdly, Gey and other colleagues determined the best glassware and test-tube stoppers that were least toxic to the cells. Researchers around the world could then work with the exact same cells.

Before there was the cloning of animals, there was the cloning of Henrietta's cells. HeLa cells didn't grow from one of Henrietta's cells. They grew from a sliver of her tissue, or a cluster of cells. Scientists wanted to grow cellular clones; that is, lines of cells descended from individual cells. This early research using the HeLa cells ultimately led to advances in stem cell isolation, animals cloning and in vitro fertilization and even human genetics. The HeLa cells were used in discovering that normal human cells have forty-six chromosomes. Due to the great demand for the HeLa cells the first for-profit cell distribution center was created. Ultimately it became a multibillion-dollar industry and drove the non-profit at Tuskegee out of business.

As the cold war heated up, scientists exposed HeLa cells to radiation to test how cells would react in a nuclear attack. HeLa cells were tested in extreme conditions like deep-sea diving and space flight. Cosmetic companies began testing their skin products on HeLa cells. Pharmaceutical companies used them to test their drugs and vitamins.

Gey was urged by his colleagues to publish research papers on the HeLa. He wrote only a brief paper claiming he was too busy. Margaret took over writing the papers from then on. Gey tried to culture other cells but none grew the way Henrietta's did and the scientists only wanted the HeLa. When HeLa became what was considered "general scientific property," it was only then that people began to wonder about the woman behind the cells.

Chapter 14: Helen Lane…1953-1954

Many people involved in the early development of the HeLa cells knew Henrietta's name. Workers at the Gey lab, Johns Hopkins and people at Tuskegee all knew. An article appeared in the Minneapolis Star about HeLa cells and mentioned her name as the source of the cells – but misspelling it as Henrietta Lakes. A press officer for the foundation wanted to write a human interest story about the HeLa cells but was warned by Gey not to mention the patient’s name. The press secretary pushed back pointing out the benefit of using Henrietta’s name for a human interest story. He promised to contact the family to get their permission. The matter went on to TeLinde who didn’t want the name used. An article could only be written if Gey could approve the article and if the patient was not identified. The article was written. It referred to the patient as Helen L. Somehow over time, the name morphed into Helen Lane.

Chapter 15: “Too Young to Remember”… 1951-1965

Cousins came to help with the children and cook for the family. Dozens came, and someone brought tuberculosis with them. A few weeks after Henrietta died, her three youngest children all tested positive for TB. Joe, the youngest, was only one-year old. He nearly died and was in the hospital for months. Sixteen-year-old Lawrence lied about his age to get a voter registration card that said he was eighteen. It backfired when he was drafted in the military spending two years state-side during the Korean War.

Ethel, cousin Galen’s wife, moved in to tend to the children. She had always detested Henrietta because her husband had feelings for her. Some felt she moved in so she could have revenge on Henrietta’s children. She denied them food, beat them, and made them do all the household chores. In the summer she took them to Clover where they worked in the field from sunrise to sunset without water or food. If she caught a child resting, she’d beat him. She beat and tortured Joe for no reason at all. The rage he felt made him a very angry young man.

Lawrence married Bobbette after he finished his tour of duty. They had one child when they learned how brutally Ethel was treating his younger siblings. The kids all moved in with Lawrence and Bobbette who raised them. Galen had molested Deborah for years after they moved in to care for the kids. After the kids moved in with Lawrence, Galen still pursued Deborah at every chance. She battled him for years. Finally, Bobbette warned him to stop or she’d kill him. Deborah didn’t know about Elsie until she was much older. She was only one when Henrietta died. She was obsessed with Henrietta and Elsie. She wanted to know everything about them.

Chapter 16: “Spending Eternity in the Same Place”… 1999

Cootie told Rebecca that the family didn’t talk about Henrietta. They had clammed up about her after her death. Her cells had lasted longer than memories of her did. Cootie told Rebecca to visit their cousin Cliff who grew up with her. Cliff was in his seventies but still tended to some chores for the tobacco farm. When Cliff learned that Rebecca was writing a book about Henrietta, he offered to take her to Henrietta’s grave.

Cliff showed Rebecca the small cabin where Henrietta grew up. The grave yard had been bulldozed over so the rudimentary signs, cards and rocks used to mark graves had all been moved and lost. All had become unmarked graves. There were so many buried in Lacks cemetery that people were being buried on top of others. There was one tombstone which marked the grave of Eliza, Henrietta's mother. The dates indicated that Henrietta was only four when her mother died. Cliff didn't understand how Henrietta's cells had kept living. People didn't talk about it. He did know that her cells cured some diseases. He thought it was a miracle.

Henrietta's great-great-grandmother was a slave called Mourning. She and her husband were owned by John Smith Pleasants who had inherited them. Mourning was married to George and had a son named Edmund who took Pleasants' surname. Henrietta's maternal grandfather was a white man named Albert Lacks who inherited part of his father's property, the Lacks Plantation. Slavery had been abolished by the time Albert died in 1889. Tommy Lacks, Henrietta's grandfather, inherited a plot of land after Albert's death. It was contested by one of Albert's brothers. Eventually, Tommy was granted the property.

It was obvious to Rebecca that racial problems still existed in the small Southern community. Cliff confirmed her thoughts when he said that the white family named Lacks didn't recognized their black relatives.

Rebecca met with Carlton and Ruby Lacks, the oldest living white Lacks in the area. Confederate flags decorated their living room. They were distant cousins of Henrietta. Ruby made it clear immediately that they had nothing to do with the black Lacks because they were against mixed marriages. Carlton said that the blacks named Lacks had just used that name because they worked for the plantation owner. Later, Henrietta's sister Gladys confirmed that all the Lacks – black and white alike – were kin. Lillian, who was Henrietta's youngest sister, was very light-skinned and "passed." She married a Puerto Rican man because she didn't want to be black any longer.

Analysis

Chapter 12

There was an almost ghoulish atmosphere at Henrietta's autopsy. Mary was there holding Petri dishes and collecting new samples of Henrietta's cancerous cells. The family was not aware that these samples were being taken. The superstitious members of the Lacks family was sure that Henrietta was trying to tell them something when a powerful storm blew up when she was being buried.

Chapter 13

The National Foundation for Infantile Paralysis established a distribution center at the Tuskegee Institute in Atlanta where the HeLa cells were cultured by black scientists and technicians. Important advancements were made in many areas of medical research. Despite the cancer, the cells were susceptible to other diseases which made their use beneficial for many kinds of research. The cells were also useful in growing viruses like herpes, mumps, and measles. Eventually, private labs purchased large amounts of the HeLa cells and made millions.

Chapter 14

“Helen Lane” was sometimes identified as the source of the HeLa cells. It was a fictitious person who never existed. Nothing irritated the Lacks family more when newspaper articles mentioned Helen Lane as the HeLa source.

Chapter 15

The family experienced hard times after Henrietta died. They were cared for by a relative who had detested Henrietta. They were abused and mistreated by this woman. Perhaps it was the struggles that Deborah faced without her mother that made her obsessed with learning everything about her.

Chapter 16

When Rebecca interviewed other members of the family, she learned about the struggles they were up against and the racism that existed in their community. She also learned that there were white relatives in the family who totally denied their kin and claimed that there was no relation.

Vocabulary

autoclave, susceptible, in vitro, genetics, chromosomes, centrifuges, intrinsic, dementia, translucent

Part Two: Death – Chapters 17 - 22

Summary

Chapter 17: Illegal, Immoral and Deplorable… 1954-1966

The HeLa cells were thriving. Virologist Chester Southam wondered if Henrietta's cancer cells could infect the scientists and technicians working with them. No one knew if it was possible. An accidental inoculation, Southam contended, could result in a transfer of the disease. Southam was a respected cancer researcher and used the HeLa cells to test his theories that cancer was caused from a virus or from an immune deficiency.

Southam injected the arm of a woman suffering with leukemia with a syringe filled with water and HeLa cells. He did the same with other subjects. None of them were told that they were being injected with someone else's cells. Cancer cells began to grow on the woman's arm within a few days. Southam removed the cancerous cells from the woman and from other subjects injected with the HeLa cells. But, the tumors grew back again and again. In one patient, the HeLa cells metastasized into her lymph nodes. Southam placed an ad for healthy volunteers to participate in cancer research. He had plenty of volunteers.

Southam opted to used prisoners for his research. He began injecting them with HeLa cells in June, 1957. Tumors quickly began to grow on the subjects' arms. These healthy subjects were all able to fight off the cancer. Ultimately, Southam injected more than 600 people with the cells. Half his subjects were already suffering from cancer. He did not tell his subjects that they were being injected with cancer cells. He felt it was unnecessary to frighten people with the dreaded cancer word. Their emotional state could skew the test results. Also, he didn't mention it because he feared that he wouldn't get many volunteers.

Southam made arrangements in 1963 with Emanuel Mandel, Director of Medicine at the Jewish Chronic Disease Hospital in Brooklyn to use their patients for research. The doctors refused to inject their patients with the HeLa cells without their knowledge and permission. Not doing so would be behaving like the Nazis. Mandel disagreed with the doctors and ordered them to inject their patients. The three doctors resigned. The Nuremberg Code was not a law. It was a result of the Nuremburg trials. The Code was a list of recommendations about medical research. Many US doctors thought it was meant for Nazis and barbarians, not American physicians.

When Southam began his research in 1954, there was no oversight. The only way to fight unethical research in the United States was in the Civil Courts. In the court ruling in 1957, on the case of patient Martin Salgo, the judge ruled that a physician would violate his duty by not fully informing his patient about the facts of a case. Informing patients would give them the ability to give their "informed consent" on their health matters.

Informed consent was not applied to the world of medical research for decades. Contemporaries of Southam accused his practices as “illegal, immoral, and deplorable.”

The debate about research ethics reached the New York State Attorney General who accused Southam and Mandel of “fraud and unprofessional conduct.” He demanded that their licenses be revoked. He wrote that every human being had a right to know what was being done with his body. Many doctors testified before the Board of Regents, the medical licensing agent in New York, that Southam’s processes were common and conducted by many researchers. The Board called for specific guidelines in conducting medical research which did not violate basic human rights. Southam and Mandel were placed on a one-year probation.

The National Institute on Health changed their standards to include ethics requirements and detailed informed consents. Researchers feared that they would suffer a lack of progress with all the publicity and the new standards. However, they had nothing to worry about. Research flourished, and much of it involved HeLa cells.

Chapter 18: “Strangest Hybrid”… 1960-1966

HeLa cells were so hardy that scientists joked that they could be grown anywhere – in sink drains or doorknobs. HeLa cells were in used in experiments on board both American and Russian space launches. Researchers were able to study the effects of space travel on human cells. Again, HeLa cells grew much faster than normal cells.

Researchers learned that all cultured cells eventually died or transformed and became cancerous. It was an important breakthrough – the very moment a cell turned malignant might be observable. Another important discovery was that once the cells turned cancerous, they all behaved exactly alike – “dividing identically and producing exactly the same proteins and enzymes.” One scientist suggested that HeLa cells might be the contaminant that caused the cells to behave alike. Although a great deal of research was conducted during this era to learn the causes of diseases and for testing drugs, very few researchers kept accurate records.

At a meeting of top culturists and scientists, it was recommended that a central bank where all cultures could be securely tested, recorded and stored be established and that all possible measures be taken to ensure that labs were sterile and free from contamination. Scientists worked at creating this bank. The first cell placed in the bank was the L-cell, the original mouse cell grown by Wilton Earle. Cell number two was the original HeLa cell.

In 1960, French researchers discovered that cultured cells infected with viruses often clumped together. They genetic material of two fused cells combined. It was known as somatic cell fusion or “cell sex.” This allowed scientists to combine any cells of their choice to study how traits were passed along. In 1965, two British researchers fused HeLa cells with mouse cells and created the first human-animal hybrid. This research revealed that cells regulate genes which could lead to gene therapy. Researchers in American and Europe conducted fusion research which led to a precursor to the human genome map. Hybrids were also used in developing cancer therapies and studying immunity in organ transplantations.

There were critics of this research. Some felt it was going too far to fuse man with animal even at the cell level. The general public did not support the research – men were trying to be god.

Chapter 19: “The Most Critical Time on This Earth Is Now”… 1966-1973

Deborah became pregnant when she was a junior in high school. Bobbette made her stay in school and after she had the baby made her get a job. Lawrence owned a convenience store and Sonny graduated from high school and joined the Air Force. Joe was the problem child. He argued with his teachers and dropped out of school in the seventh grade. He joined the army at eighteen but lasted only nine months, spending most of it in solitary confinement. He was discharged for not being able to adjust emotionally to military life.

Joe and a man named Ivy had an on-going feud. It came to a head when Joe plunged a knife into Ivy’s heart. The police were looking for Joe. David gave Joe some money and put him on a bus to Clover where Joe drank and picked fights with his cousins. Joe eventually decided to turn himself in. He pled guilty to second degree murder. The judge reviewed his military records before she sentenced him to fifteen years in state prison. He turned to Islam in prison.

Deborah’s husband was an abusive alcoholic. When she finally had enough of him she left with her children and raised her kids as a single mother. She would receive word that would more difficult to handle than her husband was.

Chapter 20: The HeLa Bomb… 1966

Geneticist Stanley Gartler announced to George Gey and other culturists in September 1966 that there was a technical problem in their field. The announcement was made at a meeting of over 700 scientists to discuss the future of cell culture. In his research, Gartler had discovered that in eighteen of the most commonly used cell cultures all contained a rare genetic marker called G6PD-A which was almost exclusively found in black Americans. He concluded that the eighteen cell cultures contained HeLa contaminants.

Gartler’s comments did not go over well with Gey. George Gey had spent the last fifteen years involving with growing and distributing HeLa cells. Scientists had literally spent millions on them for their research. Most of the cultures Gartler was speaking of came from the secure cell bank that had been established a decade before. Gartler was telling them that all the effort and resources that had been spent on creating a secure bank of human cells that they were merely growing and regrowing HeLa cells. He pointed out that new cultures were more difficult to grow after the stringent sterile requirements were instituted. Those cells that scientists observed turning cancerous weren’t normal cells to begin with; they were cells contaminated with HeLa.

Scientists were skeptical of Gartler's findings and that more work was needed. Were cell lines that researchers presumed to be those of a liver or an amniotic sac actually cells from Henrietta's cervix? Scientists were advised to test their cultured cells for the G6PD-A genetic marker. Work began on a test that would identify HeLa cells in cultures instead of testing for G6PD-A. These tests led researchers to Henrietta's family.

Chapter 21: Night Doctors… 2000

Rebecca finally met with Sonny in Baltimore a few months after he failed to show in Turner Station. She followed him to Lawrence's house. Lawrence would decide whether the family should talk to her or not. Lawrence was friendly and welcoming but he was reluctant to talk about his mother. Later, he confessed that he didn't remember much about her. He had virtually blacked out his teen years. The subject of Henrietta's cells came up quickly. He heard that by 2050, babies would be injected with her cells and they would live to 800. He wanted to know what his mother's cells really did.

Rebecca explained what a cell was to Lawrence and how they're grown in labs. Corneas were being grown in labs that could make the blind see again. Sonny returned with their eighty-forty-year old father. David was suffering from gangrene and needed his leg partially amputated but he was refusing. He wasn't going to let them cut on him like they did Henrietta. Sonny, at fifty-two, needed an angioplasty but he too didn't trust the doctors. Deborah would not be joining them. She was tired of white people asking questions and not answering her questions.

David related the story of Henrietta's death and how he first refused to allow an autopsy. He was never told about them taking her cells and keeping them alive in a lab. Sonny said that Johns Hopkins was known for doing experiments on black folks. Bobbette joined the conversation and told Rebecca that a lot of people disappeared in East Baltimore when she was a child.

There are been tales of "night doctors" for years in the black community. These night doctors supposedly snatched people off the street to use for lab research. In the days of slavery, there is evidence that doctors did use slaves for research purposes. The black community in Baltimore was sure that Johns Hopkins was built in a poor black neighborhood so they could have easy access to black subjects. Although the hospital is one of the best in the country, they have conducted some dubious research involving black subjects that violated the informed consent precedence.

Lawrence claimed that the hospital had made millions on Henrietta's cells yet her family was living in poverty. Most of them didn't even have health insurance. Dr. Gey stole the cells from Henrietta without telling her or the family that they were taking them.

Chapter 22: "The Fame She So Richly Deserves"… 1970-1973

George Gey was stricken with pancreatic cancer at the age of seventy-one. Gey wanted samples taken of his pancreas and marked "GeGe" cells. He gave specific instructions on how to grow them and that his staff should work day and night on them. When he was opened up, the surgeons concluded that the cancer was inoperable. They took no samples for the lab. Gey was furious that there would be none of his cells to grow in the lab. He underwent some experimental surgery but three months after his surgery, he died. Shortly before his death, he told his former lab assistant Mary Kubicek that she could reveal Henrietta's name if anyone asked.

Howard Jones and some colleagues decided to write an article about Gey and the HeLa cells. Looking at old photos of Henrietta's biopsy he saw that it had been misdiagnosed. They determined that her cancer was an aggressive cancer that originated from glands in the cervix instead of epithelial tissue. However, both forms of cancer would have been treated the same way at the time. Although the treatment wouldn't have changed, the proper diagnosis might explain why her cancer cells grew so rapidly. Having syphilis probably fostered the spread of the cancer. The article concluded that if nurtured properly, Henrietta's cells could live on forever. It was the first time that Henrietta's real name had been mentioned in an article. Her identity began to spread from lab to lab.

In 1971, Richard Nixon designated $1.5 billion in launching the war on cancer. He claimed that doctors could find the cure in five years. There was a renewed urgency among cancer researchers. Few people were aware that many cell cultures had been contaminated with HeLa. Most scientists were denying that they were contaminated and working at disproving the claim. In 1972, Russian scientists claimed they have isolated a cancer virus. But it turned out that that they were using HeLa cells and not the cells of Russian subjects as they claimed. After this discovery, the news media became more interested in the HeLa problem. The matter of who the HeLa donor was becoming more pressing. Some called for the authentication of the donor's name – that she should have the fame she deserved. There were guesses about who she was until Dr. Jones pronounced that the cells were from Henrietta Lacks in an article in Science magazine.

Analysis

Chapter 17

The HeLa cells were so strong and robust that some scientists feared that lab technicians could be contaminated with them. Virologist Chester Southam undertook some edgy research. He injected HeLa cells into subjects who were healthy and subjects who had cancer. The healthy individuals were able to fight the cancer off but those who were ill developed tumors. None of his subjects knew that they were being injected with cancer cells. There was no oversight during this time to regulate this and other radical forms of research. As a result, the Board of Regents who was the licensing agent called for tighter guidelines for researchers those that would not violate basic human rights.

Chapter 18

Researchers learned more about the behavior of HeLa cells including that they clumped together when infected with viruses. Scientists also observed that all cells either died or eventually developed cancer. The first human-animal cloned cell was developed. Hybrid cells opened up brand new opportunities in medical research all thanks to Henrietta’s cells.

Chapter 19

Henrietta’s children suffered as adults. Deborah became pregnant in high school. Joe had anger issues which caused him to be dismissed from the army for emotional problems. He killed a man who he had a long-time feud with. Deborah left her husband who was an alcoholic who abused her. The children of Henrietta all wondered how different their lives would have been had Henrietta lived.

Chapter 20

Geneticist Stanley Gartler dropped a bomb at a meeting of culturists. He had determined that 18 of the most commonly used cell lines were contaminated with the HeLa cell. It threw the medical research community on its head. Scientists devised several ways to detect the HeLa cell in other cultured cells. If the HeLa cell contaminated another cell it would skew the research conducted on that cell. This turn of events illustrated just how strong and dominant the HeLa cell was.

Chapter 21

The distrust that the Lacks family had for outsiders was based in the mistreatment they suffered from the medical field but there was also another reason for suspicions. For decades, blacks believed that scientists and doctors snatched black people off the street to sue for research. There is evidence that slaves were used for medical research. Their fears may not have been completely unfounded even in modern times. Johns Hopkins was responsible for some dubious research using black subjects.

Chapter 22

It was discovered years after her death that Henrietta’s cancer had been misdiagnosed. The question lingers as to whether she would have had better results had she been treated for the disease she actually had. A rush on HeLa cells resulted from President Nixon’s war on cancer.

Vocabulary

Tularemia, deleterious, innocuous, degradation, enzymes, contaminant, hybrid, irrelevant, indigent, epithelial, ubiquitous

Part Three: Immortality – Chapters 23 - 27

Summary

Chapter 23: “It’s Alive”… 1973-1974

Bobbette Lacks was having lunch with her friend Gardenia whose brother-in-law was in town. He worked at the National Cancer Institute. When he realized that Bobbette’s last name was Lacks, he told Bobbette that he’d been working with the cells for years in his lab. He had read that the cells belonged to a Henrietta Lacks. Bobbette said that Henrietta Lacks was her mother-in-law’s name but that they cells couldn’t belong to her because she’d been dead for twenty years. The man asked if Henrietta had cervical cancer. Bobbette was surprised that he knew that. He told her that the cells were her mother-in-laws because the cells belonged to a black woman named Henrietta Lacks who died in the fifties. He explained that he often ordered the HeLa cells from a supplier just like everyone else.

Bobbette was stunned. She thought back to the rumors about black people being used by researchers. The man told her about the current controversy about the HeLa cells contaminating other cultures. She wanted to know why no one in the family knew about the cells. It was then that the family first knew how Henrietta’s cells were being used.

A group of doctors and scientists met at Yale University to discuss a method for stopping the HeLa contamination. One expert pointed out that DNA samples from living relatives could provide them with genetic markers that would identify contaminated cultures. One of the doctors knew that relatives of Henrietta were patients at Johns Hopkins and could easily be tracked down.

A postdoctoral fellow, Susan Hsu, was elected to get blood samples from the family. Again, the family was not given the real reason for this request by the medical field. Hsu told him that they wanted to test his children to see if they had inherited Henrietta’s cancer cells. Deborah was frightened. Her mother had gotten ill when she was thirty. Deborah was then twenty-four and had always feared turning thirty. A few days after Hsu first called, she was sitting at the dining room table in Lawrence’s house with David, Lawrence, Sonny, and Deborah. She had come with Dr. McKusick who was taking blood samples. Deborah called the hospital a few days later asking for the results of her blood test. No one knew what she was taking about. Hsu wanted Lawrence to get permission to get a sample from Joe who was still in prison. Hsu sent Lawrence an article about his mother’s cell but he couldn't recall receiving it.

Deborah was obsessed with the blood test. She became fearful that she had cancer. Then she began to think that she had actually been injected with cancer cells. When she was called to give more blood, she decided to ask questions about her mother that no one else could ever answer. Deborah gave more blood four days before the informed consent rule went into effect. McKusick's research of the Lacks family occurred at the same time when genetic research was advancing.

When Deborah came in to give her second blood sample, she asked McKusick about her mother's disease and if she would die young like her mother. McKusick told her all the positive stories about HeLa cells. He gave her a book, "Medical Genetics," which would answer all her questions. He pointed out a paragraph in the book that contained her mother's name. There was also a picture of Henrietta in the book. She had never seen that photo of her mother before. No one knew how McKusick obtained it because no one had asked for the family's permission to use Henrietta's photo.

When Rebecca interviewed Susan Hsu, she was sorry that the Lacks had never been asked for permission to use the picture and that the hospital didn't tell the family the real reason why they were extracting blood from her relatives. She asked Rebecca to tell the family that they should be proud of their mother and that she will never die as long as medical science is around.

Chapter 24: "Least They Can Do"… 1975

The Lacks family didn't know about the contamination problem with the HeLa cells. A young writer named Michael Rogers became interested in Henrietta's story. He was a reporter with the Rolling Stone. He showed up at Lawrence's house in the winter of 1975. He immediately sensed that they hadn't been treated well by medical research because they had more questions than he had. In his article he explained how the HeLa cells were sent to research institutions around the world. The article also said that Gey and the hospital received $25 for a tiny vial of cells. It made the brothers believe that their mother's cells had been stolen and that the hospital had made millions on them.

The Geys made a comfortable salary, but they were not wealthy. He did not profit from the sale of HeLa sales. Although private labs profited from HeLa Sales, there is no evidence that either the Geys or the hospital made money. Lawrence and his brothers gave handouts to let people know how Henrietta and the family had been cheated out of money that the hospital was making on HeLa cells. Deborah wasn't interested in fighting the hospital for money. She wanted to learn about her mother and the cells; so, she struggled through the book that Dr. McKusick had given her. She read articles about the use of her mother's cells that gave her nightmares. It irritated her that many scientists and reporters continued calling the source of the cells Helen Lane.

When Mike Rogers' Rolling Stone article was published on March 25, 1976, it was the first time the real story was told. It was also the first time the general public learned that the woman was black. Other reporters became interested and wrote articles for a number of other publications. The blood from Henrietta's children led to a map of Henrietta's DNA that scientists could use to help identify HeLa cell contamination. The results of the blood tests were published in an issue of Science magazine. If that were done after 1996 when HIPPAA laws had gone into effect, there would have been some stiff fines and jail time by those who released private medical information.

The Lacks family didn't have the money to hire an attorney to sue the hospital for a privacy violation. But, John Moore, who lived across the country, did have money for an attorney. He knew what had been done with his cells and how much money they had made.

Chapter 25: "Who Told You You Could Sell My Spleen?" 1976-1988

John Moore worked twelve-hour days, seven days a week as a surveyor on the Alaska pipeline. He began suffering from bleeding gums and a swelled stomach. It turned out he had hairy-cell leukemia, a rare and deadly disease. His spleen was filled with malignant cancer cells. He was sent to UCLA where his spleen was removed. He signed a consent form that his severed tissue could be disposed of by cremation. He re-settled in Seattle and flew to UCLA for regular check-ups. Seven years later, he was given a new consent form to sign that gave his permission all rights to any cell line that the hospital developed from his blood or bone marrow.

Moore asked his physician, Dr. Golde, about the consent form. He felt that Golde wasn't being straight with him in his response. Moore signed the consent form, but he also circled that he did not give the hospital rights to his cell line. Golde was on the phone before Moore got to his parents' house telling him that he circled the wrong response. Moore said he didn't have time to come back in and change it. He flew home to Seattle and there was a new consent form waiting for him in the mailbox. He took the form to his lawyer who discovered that Golde had spent the last seven years developing and selling a line of cells he called Mo. Golde had filed for a patent on the cell line and entered into an agreement with a bio-tech company that was worth $3.5 million to Golde. Its market value was $3 billion.

In the early 1970s, a man named Ted Slavin marketed antibodies from his blood. He had been born a hemophiliac and later had been exposed to hepatitis B virus several times. A doctor told Slavin that his blood was very valuable. That was when Slavin began selling it himself. The use of Slavin's blood led to the creation of the first hepatitis B vaccine. Slavin started a company with others who suffered from the other blood disorders.

Moore couldn't sell his cells because Golde had a patent on them. Moore thought his lawsuit wouldn't go anywhere but it panicked scientists and researchers around the world. It would bring chaos to the field of medical research. The general public didn't know that cell lines brought big money until the Moore case. The judge threw the suit out on the basis of the HeLa cells. He cited that no one had sued over the HeLa cells which proved that patients didn't mind having their cells used for research. Moore won an appeal in 1988 on the basis of informed consent. Golde appealed that decision and won. It was determined by the Supreme Court of California that when an individual leaves any tissues behind in a doctor's office or lab, he has abandoned any claim to them. The court did find Golde acted improperly by not telling Moore about the use of his cells. Further, patients should be informed of any financial interest from such tissue. The court ruled that Moore should not receive any monetary award because it would threaten future research.

Chapter 26: Breach of Privacy… 1980-1985

Deborah made it past her thirtieth birthday and married James Pullman a year later. Joe was out of prison and had been certified to be an air conditioner repairman. He still had his issues with drinking and anger. He entered into several medical research projects to earn extra money. Sonny got in trouble with the law and landed in jail for narcotics trafficking. Deborah's son Alfred also had some brushes with the law and did some time in the local jail.

In 1985 Michael Gold, a reporter for Science 83 magazine wrote a book about Walter Nelson-Ree's campaign to stop HeLa contamination. There was a chapter about Henrietta that contained her photo and details taken from her medical records. Deborah was thrown into a depression when she read about her mother's final days. Rebecca asked Gold who gave him Henrietta's medical records. It was one of the doctors, but he didn't remember which one. What he did was illegal and unethical. He should have contacted the family for permission to use the information. It was also not normal for a doctor to hand out the records of a patient. Federal laws prohibit doctors from revealing medical records now. But, in the early 1980s, there were no federal laws to prevent it. A few patients had successfully sued doctors for revealing private medical information. The difference between them and the Lacks family was that their family members were still alive. There were no privacy rights for the dead.

Chapter 27: The Secret of Immortality… 1984-1995

The cause of Henrietta's cancer and the reason why her cancer cells were immortal were finally discovered thirty years after her death. A German virologist named Harald zur Hausen discovered a new strain of sexually transmitted virus he named Human Papilloma Virus 18 or HPV-18. He tested HeLa cells for HPV-18, and they tested positive. When testing a sample of her original cells, Hausen found that Henrietta had been infected with multiple instances of the HPV-18 virus.

More research revealed that Henrietta's cancer started when her eleventh chromosome was infected with the DNA of HPV which turned off her tumor suppressor gene. Scientists were still in a quandary as to why her cancer cells flourished both in and out of her body. Cervical cancer cells are typically some of the most difficult to culture.

Hausen's discovery was important, but there was other important work done in the 1980s with Henrietta's cells. HeLa cells were used extensively in AIDS research which placed it in the center of a raging debate about the ethics of altering DNA. Activist and author Jeremy Rifkin sued to stop the use of HeLa cells in AIDS research. He asserted that the HeLa line of cells was so powerful that it could contaminate other cultures and be a danger to lab technicians. But, the suit was dismissed and the AIDS research continued.

Some scientists claimed that the original HeLa cells had evolved into new cells that were no longer genetically identical to it. In essence, they were no longer "human." From this theory, other scientists jumped on the idea that perhaps the key to longevity, even immortality, was hidden in HeLa cells. In the early nineties, a Yale scientist discovered that HeLa cells contained an enzyme called telomerase, which was in part responsible for the virulent nature of Henrietta's cancer cells.

Analysis

Chapter 23 Analysis

Medical research professionals once again abused and lied to Henrietta's family when they contacted them for blood samples. They were led to believe that they were being tested for cancer. In reality, the blood was needed to establish genetic markers that would help scientists detect a cultured cell that was contaminated with the HeLa cells. The family was not treated with honesty or respect.

Chapter 24

Through an article written by a Rolling Stone reporter, the family came to believe that millions of dollars were being made off Henrietta's cells. The Rolling Stone article was the first published word that the source of the HeLa cells was Henrietta Lacks.

Chapter 25

The issue of a person's rights about the use of his blood and tissue came to a head in the case of John Moore who sued his doctor when he found out that the doctor had been making millions of dollars by using Moore's tissue. The HeLa cell was cited in the judge's decision. The judge's ruling noted that a patient needs to be informed of a doctor's intended use of the patient's tissue and of any financial interest that may be gained.

Chapter 26

Henrietta's medical records were contained in a magazine article in the days before there was a federal law prohibiting a doctor or medical professional from revealing a patient's records, Although some patients sued over such revelations, the Lacks family didn't have the money to sue.

Chapter 27

Sadly, Henrietta didn't have to die young. It was her philandering husband who infected her with multiple instances of sexually transmitted diseases that caused her cervical cancer. Rightfully, the family was extremely angry toward the hospital and the medical research field. However, they only had to look in their own house to find the culprit who caused the tragedy.

Vocabulary

atypical, prodigy, hemophiliac, virulent, virologist, epiphany, telomere

Part Three: Immortality – Chapters 28 - 32

Summary

Chapter 28: After London… 1996-1999

British producer Adam Curtis became interested in Henrietta’s story and began working on a documentary about her in 1996. Deborah was hopeful that the family and the world would learn the true story about her mother. Curtis conducted filmed interviews of Henrietta’s children and other relatives. Also filmed was the family’s journey to Morehouse in Atlanta for a conference organized by Pattillo to honor Henrietta’s contribution to advancements in science and medicine. The Atlanta mayor decreed a “Henrietta Lacks Day.” Deborah gave a brief speech at the gathering – sending her and her siblings love to their mother.

Courtney Speed and others in Turner Station were on a committee with the goal of focusing attention of black people from Turner Station. When they learned about Henrietta and HeLa, they put all their efforts to include and honor Henrietta in their project. The committee founded the Henrietta Lacks Health History Museum Foundation, Inc. They had many plans to honor Henrietta including commissioned a life-size wax figure of her. Deborah was initially against the museum but cooperated with them when she thought they might uncover more information about her mother. Mary Kubicek spoke at an event about her work in first growing cultures of Henrietta’s cells. Barbara Wyche of Morgan State University worked hard at raising funds for the museum. Johns Hopkins Hospital was asked to contribute. The hospital responded with a letter assuring the family that Henrietta’s cells were not misused and that the hospital did not profit from their use.

Sir Lord Kennan Kester Cofield was a distant cousin of Deborah’s husband. Cofield claimed to be a doctor and a lawyer. He contacted Deborah and advised her to copyright the name, “Henrietta Lacks.” He also felt that Johns Hopkins Hospital was guilty of malpractice and that the family was due some of the profits from the sale of Henrietta's cells. Cofield would not charge anything upfront. Cofield was hired by the family. He reviewed hospital files and found that Henrietta’s cancer had been misdiagnosed and that she may have died from excessive radiation therapy. When he tried to get more files from the hospital, a background check revealed that he wasn’t a doctor or lawyer. He was a fraud who had spent time in prison. A hospital attorney advised Deborah that Cofield was a con artist.

Cofield wound up suing Courtney Speed and Deborah and her family for breach of contract. He claimed that the family had no right to Henrietta’s records because she was born Loretta Pleasant. He accused them of fraud. The hospital's attorneys promised Deborah that they would fight Cofield for them. Deborah decided it was time to read her mother’s medical records. She requested a copy of the records and those of her sister, Elsie. She read that her sister had been confined to a mental institution. She wondered if Elsie had been used for research. Between the lawsuit and the old medical records, Deborah broke out in hives and had a mini-breakdown for which she was hospitalized. When she was released she heard from Pattillo who said that a reporter wanted to write a book about her mother. The reporter was Rebecca.

Chapter 29: A Village of Henriettas… 2000

Rebecca tried contacting Deborah multiple times over the span of a year. Deborah's husband answered the phone one day and told her directly that family members would not be talking until there was a monetary agreement. Deborah finally agreed to talk under certain conditions. The first condition was that the full truth be told, including the fact that there was never a Helen Lane. Secondly, Deborah also insisted that Henrietta’s daughter Elsie be included in the story.

Rebecca started out her first meeting with Deborah by giving her a present. It was a framed print of Henrietta’s chromosomes that Christoph Langauer, a young John Hopkins cancer researcher, had created. It was done in bright colors and looked like glowing fireflies. Deborah was delighted with the painting. Rebecca told Deborah that Langauer had invited her to come to his lab so he could show her Henrietta’s actual cells. Deborah dumped a tote out displaying all the documents, newspaper articles, and other material that she had about her mother.

Deborah shared her concerns about how black people were used by researchers. She thought maybe there were a bunch of women walking around in London who looked just like Henrietta. A reporter had told Deborah that researchers in London had cloned her mother. Rebecca tried to explain that her mother’s cells had been cloned, not Henrietta. But, Deborah was sure that her mother had been cloned and presented a video tape of the movie, “Jurassic Park” as proof.

Rebecca met with Deborah over the next three days. Rebecca explained that when blood was taken from Deborah and her siblings, it was to be used to look for genetic markers. It was not to test them for cancer. Deborah had her mother’s medical records with her. She was clinging to them ferociously. She wasn’t ready for Rebecca to review them. It was difficult for Deborah to trust anyone.

Chapter 30: Zakariyya… 2000

Deborah decided it was time for Rebecca to meet Joe who had converted to Islam and renamed himself Zakariyya. Rebecca had always heard that he was the angriest over what had happened to his mother. He had served his time and had his own apartment. Deborah wanted to catch her brother before he started drinking. She warned Rebecca that whatever she did she shouldn’t call her brother Joe.

Like Deborah, Zakariyya was partially deaf and was nearly blind without glasses. He lived in an assisted living complex. They encountered him in the parking lot. Since they were early, he wasn't ready for them. He sat on a bench in front of the complex eating ice cream while Rebecca and Deborah sat in silence a short distance away.

When he was ready, Deborah left Rebecca alone with her brother. Zakariyya asked if Rebecca had brought the magazine from Johns Hopkins in which she had contributed an article about Henrietta. He thought that his mother waited to go to the hospital because she was pregnant with him and wanted to have him first. He felt that the doctors had been wrong and had lied to the family for twenty-five years. They had stolen his mother's cells. They had profited from her cells while Henrietta and her family had not. He thought that his anger stemmed from the issue with the cells. He would rather have had his mother than the cells and the money they were worth. Deborah gave the chromosome painting to Zakariyya. His eyes filled with tears when he took it from her. Deborah invited him to go with her to see her mother's cells. He was all for it.

Chapter 31: Hela, Goddess of Death… 2000-2001

The day after the three-day interview with Rebecca, Deborah received a call from an unknown person who warned her not to talk to white people about her story. Deborah left a message for Rebecca that she couldn't talk to her anymore. But, she had second thoughts and changed her mind. She explained that everyone was warning her about racism and white people. She didn't want any doctor or anyone to be punished over HeLa cells. She just wanted the truth to be told. Rebecca's conversations with Deborah lasted over the next year. Deborah decided to share her mother's medical reports with Rebecca when the time was right.

Deborah wanted to know how much Rebecca was being paid to write the book. Rebecca explained that her book wasn't sold yet and that she was funding the research and work herself. If the book ended up being published, Rebecca planned to set up a scholarship fund for descendants of Henrietta Lacks. On good days, Deborah trusted her on other days she thought she was lying to her. To convince Deborah that she was credible and that she was being honest about her intentions, Rebecca sent Deborah copies of all her research. Finally, Deborah began to trust her. Deborah accompanied Rebecca on some of her journeys to gather more information on Henrietta.

Rebecca showed Deborah how to search for information about her mother on the Internet on an old computer someone had given her. At one point she confused her mother with "Hela," a Marvel comic book character. She panicked when she found blog posts on the cloning of Henrietta's cells, thinking that Henrietta was being cloned. Rebecca explained again that her cells were cloned. She told Deborah that her mother could not be cloned from her cells.

Deborah and her family were very poor. She was glad that her mother's cells helped people, but she would have just liked enough money to purchase health insurance. Deborah began to conduct serious research on the computer about her mother. She saw some things on blogs that she didn't like. There were accusations that her mother contracted her disease due to "sleeping around." Deborah was invited to speak at a meeting of the National Foundation for Cancer Research. They couldn't give her family any money, but they felt that Henrietta and her family had been abused. The foundation wanted to give Deborah the chance to set the record straight.

Chapter 32: “All That’s My Mother”… 2001

Deborah and Zakariyya met Rebecca at Johns Hopkins Hospital to view their mother’s original cells. They met at the large statue of Jesus in the lobby. Christoph greeted them warmly, acknowledging that it was probably hard for them to come to the hospital after what the family had been through. The tour started in the freezer room so they could see how their mother’s cells were stored. After that, they looked at the cells through a microscope.

Christoph zoomed the microscope to a high magnification and brought in focus an image filled with hundreds of cells with bulging dark centers. Christoph explained to Deborah and Zakariyya what they were seeing and explained that DNA was located inside the cells. What made Henrietta the unique Henrietta was all contained in the DNA. Her cancer came from a mistake in the DNA which can happen when a person is exposed to harsh chemicals. However, in Henrietta’s case, the DNA irregularity was caused by HPV. He assured a nervous Deborah that alternations in DNA are not passed on to descendants. All the cells that they observed were cancer cells. They possessed no normal cells belonging to Henrietta which was a surprise to Deborah. They were able to observe one of Deborah’s cells dividing in half.

Christoph was sympathetic with the hurt Henrietta’s family experienced from their mistreatment by doctors and scientists. Deborah was amazed as she watched the cell divide, knowing that it was a living cell of the mother she never knew. Christoph felt the family should receive some of the money made on Henrietta's cells. He also believed that when a cure for cancer was found, the HeLa cells would be at the center of the discovery.

Analysis

Chapter 28

Deborah and her family wanted Henrietta to get the fame and recognition she deserved for her contribution to science and medical research. However, when the attention came it wasn’t all positive. Giving a speech at Morehouse in Atlanta for Henrietta Lacks Day was a highlight as was the documentary made by a British producer. But, the family had to contend with a fraud who tried to exploit them and then sued them. After that experience, Deborah was wary of Rebecca Skloot, the reporter who wanted to write a book about her.

Chapter 29

For years the Lacks family had been mistreated, lied to, and ignored by doctors and medical research professionals. It was difficult for them to trust anyone. They felt that they had been cheated out of not only the truth but a cut of the millions of dollars that her mother’s cells had garnered. Rebecca faced the challenge of writing a complicated and unique story and a family that didn’t trust anyone, including her.

Chapter 30

Joe, aka Zakariyya, was Henrietta’s youngest child. He attributed his anger issues to the issues surrounding Henrietta’s death and the use of her cells. Her early death took his mother from him. Although he was an ex-con and a big tough guy, when Deborah gave him the painting of his mother’s chromosomes, he was deeply touched. He gripped it close to him – it was one of the only remnants of his mother that he had. Had Henrietta lived, Zakariyya might have matured into a different person.

Chapter 31

Racism, poverty, poor education, mistreatment by the medical research field, and the entire issue involving their mother’s cells all contributed to the Lacks family’s distrust for outsiders. They especially distrusted white people who were seeking information on their mother. In order to write the true story of Henrietta, Rebecca Skloot struggled to build trust in Deborah whom she worked closely with for over a year. The exploitation of the HeLa cells had a far-reaching and lasting impact on the family.

Chapter 32

Neither Deborah nor Zakariyya remembered their mother. When Christoph invited them to the lab to see their mother’s living cells. Deborah considered the experience a miracle. Rebecca’s and Christoph’s kindness and understanding of the hurt and pain Deborah and Zakariyya had suffered over the years renewed their faith in people – even white people. Christoph explained cells and DNA to them and told them his belief that when a cancer cure was found, their mother’s cells would be largely responsible.

Vocabulary

serendipity, commemorate, charisma

Part Three: Immortality – Chapters 33 - 38

Summary

Chapter 33: The Hospital for the Negro Insane… 2001

Rebecca kept her promise to help Deborah find out what happened to her sister, Elsie. They drove to Crownsville to try to find some records on Elsie. Crownsville was the former Hospital for insane blacks. The campus and buildings were surprisingly attractive and sprawling. They couldn't find anyone in the main building, but they did find a door marked "Medical Records." There was a sign indicating that there was no access but the door was unlocked, and they went inside. They were amazed at the huge warehouse that stored the records.

They found their way to the office of hospital director Paul Lurz who told them that the facility was not a great place for blacks in the 1950s because there was little funding for treating them. He was sorry that Deborah's sister had been there. Most of their records from the fifties and earlier were contaminated by asbestos and were destroyed. He had stored away in his file room a few files that remained from that era. He found a bound book of autopsy reports. They found the entry for Elsie Lacks. They were shocked upon the discovery of a photo of Elsie. She looked very distressed and appeared to be bruised. The autopsy report indicated that Elsie was diagnosed with "idiocy" which was directly connected with syphilis.

Rebecca and Deborah were given a file on the conditions of Crownsville when Elsie was there. The conditions were deplorable. Patients slept two to a twin bed. Unruly patients were tied to their beds. Scientists often conducted research on patients without permission. There were hundreds of patients who had been placed in Crownsville with no cause. Many were later released when a new director took over.

Chapter 34: The Medical Records… 2001

Rebecca and Deborah went over Henrietta's medical records in Rebecca's hotel room. They ran across a doctor's report when Henrietta was pregnant with Deborah three days before her birth. Deborah especially was thrilled with one paper that had her actual mother's signature on it. It was the consent form for the radium treatment when her cells were first taken. Deborah was upset that Elsie's autopsy report had diagnosed her with "idiocy." Rebecca explained that the term was used years ago for mental retardation.

Deborah reverted to her frantic state when she thought Rebecca was going to include a word that was on Elsie's autopsy report that Deborah didn't want her to use. Rebecca promised repeatedly that she wouldn't use the word. But, Deborah became panicked and started stuffing all the papers back into her bag. She accused Rebecca of working for Johns Hopkins. For the first time in their relationship, Rebecca lost her temper. Deborah calmed down and told Rebecca how Cofield had exploited and duped the family. Deborah went to her room but knocked on Rebecca's door every fifteen minutes to check on her.

Chapter 35: Soul Cleansing… 2001

Deborah and Rebecca visited Clover and the house where Henrietta was raised. They visited Deborah's Aunt Gladys and cousin Gary. She showed them her photos of Gladys. She was upset over the photos and seeing her mother's cells. Deborah had a bad case of hives and was jittery pacing around until Gary made her sit down. It was difficult for her to calm down because she had her mother and sister on her mind. Suddenly, Gary became emotional and embraced Deborah. They both prayed aloud. Gary sang a hymn.

Gary told Rebecca that Deborah couldn't handle any more. The "cells" were too much for her. He prayed aloud to God to give the burden of the cells to Rebecca. Deborah felt better after their prayers. It was pouring outside. Deborah held her coat over her head and asked Rebecca if she was ready for some soul cleansing.

Chapter 36: Heavenly Bodies… 2001

Deborah went to see her doctor the next day. Rebecca met with Gary. She told him the hymn he sang was still in her mind. It was the Lord trying to tell her something, he told her. Gary believed that the cells were Henrietta quoting the Bible that those who believed in Jesus would never die. He thought Henrietta was a chosen person. She was an angel, a heavenly body. HeLa was Henrietta's spiritual body.

Chapter 37: "Nothing to Be Scared About"… 2001

Deborah's blood pressure and blood sugar were so high that her doctor was surprised she hadn't had a stroke. It explained her frantic, strange behavior. The doctor told her she had to avoid stress so she decided not to go on any more research trips with Rebecca. But, Rebecca kept her informed on the phone and only told her positive things she had discovered about Henrietta. Deborah decided she wanted to go back to school so she could understand the science behind her mother's cells. She was preparing the speech to give before the National Foundation for Cancer when she got calls from Lawrence and Zakariyya warning her not to talk to anyone. They wanted to sue all the doctors involved. Her son was in prison and was facing a trial. Lawrence's son had been arrested and was in jail. She swore none of those things would stop her from giving the speech.

The next morning was September 11, 2001. Rebecca was on her way to D.C. to attend the National Foundation for Cancer event and see Deborah give her speech. She turned around and went home when the planes hit the World Trade Center. Deborah also decided not to go to D.C. where the Pentagon had been attacked. At church that Sunday, Deborah realized she couldn't move her arm. Her face sagged and she couldn't speak. She had a stroke. Her husband drove her to the fire department down the street where they gave her oxygen. She was hospitalized, and the doctors expected her to recover fully. Deborah didn't have enough money to cover school and books and gave up the idea. She decided to concentrate on the education of her grandchildren.

Deborah and Rebecca attended church together where Deborah's second husband, the Rev. Pullum, preached. Rev. Pullum called Rebecca up to tell the congregation to talk about what she learned about Henrietta's cells. Rebecca gave a brief summary of Henrietta's story. The Rev. Pullum followed her remarks with commentary on Henrietta and how the world would know who she was.

Chapter 38: The Long Road to Clover… 2009

In January 2009, Rebecca drove to Clover; but, it was gone. She found remnants of Henrietta's youth and collected some for Deborah. Everything about Henrietta's past had vanished. Gary died of a heart attack at age 52. Zakariyya still talked about suing the doctors. Deborah left her husband and moved into an assisted living apartment. When she filed for divorce, she listed her assets at $732 a month from social security and $10 in food stamps. She had nothing in her checking account.

When Rebecca finished her book, Deborah wanted her to come and read it to her. After being unable to reach her, Rebecca called Sonny who told her that Deborah had passed away. Sonny told Rebecca that Deborah was finally with their mother and sister.

Analysis

Chapter 33

Deborah was satisfied to learn something about Elsie, the sister she never knew she had until she was an adult. Her confidence and trust in others and those in authority were boosted again when the director of Crownsville where Elsie had been institutionalized was kind to her and helpful in locating some information about her sister's stay there. It was a measure of resolution for Deborah.

Chapter 34

Deborah pushed Rebecca over the edge with her paranoia and anger and accusations. But, Deborah quickly backed off when she saw that Rebecca was angry and wasn't going to take any more guff from Deborah. Deborah knew deep-down that Rebecca was a friend who was trying to help the family get the truth out about Henrietta.

Chapter 35

Gary's concern over Deborah's emotional state indicated that the entire family realized how impacted Deborah had been about Henrietta's cells. He felt that it was too much for Deborah and wanted Rebecca to take the burden of the cells from Deborah and carry it herself.

Chapter 36

Like many in his family, Gary was very devout. He either believed or convinced himself that Henrietta lived through her cells and that she had eternal life.

Chapter 37

The pressure and emotions of learning about her mother and Elsie took their toll on Deborah. Deborah found resolution in her travels with Rebecca. She learned enough to enable her to move on. Instead of obsessing about her mother she planned to concentrate on her grandchildren.

Chapter 38

Ironically, Deborah died when Rebecca finished her book. She knew the truth was coming out and was ready to go and be with her mother and sister.

Vocabulary

genealogy, idiocy, incoherent, otherworldly, ethereal, histology, morphologic, razed

Afterword

Summary

When presented with the details of Henrietta’s stories, most people feel that taking her cells without her knowledge was illegal. It is illegal now, but it wasn't in 1951. Blood and tissue samples are filed now. The RAND Corporation estimated that sample tissues of more than 178 million people were on file in the United States. Tissue research is growing by leaps and bounds. Samples are used to develop vaccines and other products. As of 2009 when the book went to press, no law had been established on whether or not a person has a right to control the use of one’s tissues. Consent for their use and profits from the use of tissues are the two main points of controversy in tissue research. Tissue research is not covered by federal policy. However, doctors and scientists are required to procure consent forms from patients like Henrietta. Standards established by the National Health Institute regarding the collection and use of tissues are not legally binding. The Lacks family didn’t have many options for a lawsuit since the tissues were taken so long ago. The family has accepted this reality and hopes that Henrietta’s immortal cells will continue to do good in the world.

Analysis

Henrietta’s cells made advancements in medical research. They also opened a debate on a patients rights over the use of their cells. The debate continues.

Vocabulary

appendectomy, hepatitis, contemplating, pro bono

Important People

Henrietta Lacks

Henrietta Lacks was born in 1920 in Roanoke, Virginia, to a poor family of tobacco farmers. Her mother died when she was just four-years-old. Henrietta's father couldn't care for her and her eight siblings. So, he split them up and sent them to live with other relatives. Henrietta was sent to her grandfather, Tommy Lacks, who was also raising another grandchild, David Lacks, Henrietta's first cousin. The children were made to work in the tobacco fields from sunrise to sunset without water or food. It was a rough life for anyone, especially children. When they matured, Henrietta and David had sex which resulted in her first pregnancy at fourteen. Eventually, Henrietta and David married, had four other children, and moved to Baltimore where David got a job at a steel mill.

David caroused with other women which resulted in Henrietta becoming infected with both syphilis and gonorrhea. Many experts felt those diseases led to the development of her invasive form of cervical cancer. When Henrietta was thirty, she was diagnosed with cancer and underwent radium treatment. The cancer returned. Eventually, Henrietta succumbed to it.

Henrietta's story doesn't stop there. Without her knowledge, cancerous cells from her cervix were taken for research. Unlike most cultured cells, Henrietta's cells were strong. They doubled every day and filled to capacity whatever container they were put in. The lab director had never seen anything like it. Henrietta's cell line was called HeLa cells. HeLa cells continued to be cultured. Over the years, literally trillions of cells were produced and used for research around the world. Private labs made millions on the sale of HeLa cells although Johns Hopkins Hospital did not profit from them.

Henrietta's rights were violated and her family was kept in the dark about the use of Henrietta's cells. They were considered to be immortal cells because they thrived and reproduced no matter what the circumstances. They were so strong that they easily contaminated other cultures.Scientific advances were achieved with HeLa cells.

Deborah Lacks Pullum

Deborah was a toddler when her mother Henrietta died. She did not remember Henrietta. Deborah wasn't aware until she was an adult that she had a sister named Elsie. Like the rest of Henrietta's family, Deborah didn't know about Henrietta's cells until twenty years after her mother's death. Deborah always longed to know more about her mother. When she learned about the cells and that she had a sister, she became obsessed with learning all about them. She wanted to know them.

Rebecca Skloot tried to contact Deborah for a full year before she agreed to talk to her. Deborah and her family were leery of outsiders wanting to know more about her mother, who was the source of the amazing “immortal cells” that had been produced by the trillions and used in medical research labs all over the world. The family was especially wary of white people. Deborah and her family had been kept in the dark about the existence of Henrietta's cells. The Lacks had been lied to, ignored, and mistreated by medical professionals and scientists, even though Henrietta’s cells were literally everywhere. Her cells had been at the center of many advances in scientific and medical research.

In spite of the family's initial resistance to talk to Rebecca, she was persistent. She finally convinced Deborah that she wanted to tell Henrietta’s story so the world would know the truth about Henrietta and her immortal cells. Deborah and Rebecca went on several research trips to learn more about her mother and sister. But, Deborah was not in good health. The stress proved too much for Deborah. After Rebecca finished the book, she planned to read it to Deborah. Then, she learned that Deborah had passed away. Deborah had found resolution. She had died in peace. Finally, she was with her mother and sister.

George Gey

George Gey was head of tissue culture research at Johns Hopkins Hospital. In an effort to find a cure for cancer, Gey and his wife Margaret had worked for decades trying to grow cancer cells outside the body for study and research. Their goal was to grow the first immortal human cells. Gey eagerly accepted the offer to culture cervical cancer tissue. Gey took tissue from every available public patient, including Henrietta.

Howard Jones

Howard Jones was the gynecologist on duty at Johns Hopkins Hospital when Henrietta Lacks came in complaining of a “knot” in her lower torso. Jones reviewed her prior records which indicated that she had contracted both syphilis and gonorrhea but had cancelled many follow-up appointments. Jones found that the “knot” was a tumor. He had it biopsied and sent to the lab which confirmed that Henrietta had cancer of the cervix. Somehow the other doctors had missed it.

David Lacks

David Lacks was Henrietta’s husband. He was also her first cousin and had both been raised by their grandfather, Tommy Lacks. The two became more than cousins and Henrietta became pregnant when she was only fourteen. David caroused with other women. As a result, he had infected Henrietta with both syphilis and gonorrhea. The diseases may have contributed to the development of her cervical cancer.

Mary Kubicek

Mary Kubicek was the lab assistant in Gey's lab who was assigned to cultivating Henrietta's cancer cells. She wasn't excited about another line of cells that would just die in a few days. But, she took the cells and began the process. Mary was surprised and astonished when Henrietta's cells had doubled within one day. They were growing like wildfire. Miraculously, they never stopped growing.

Tommy Lacks

Tommy Lacks was both Henrietta's and David's grandfather. He raised both of them when their parents weren't able to do so. He allowed Henrietta and David to sleep in the same bed. This led to an early pregnancy for Henrietta at the age of fourteen.

Dr. Richard TeLinde

Dr. Richard Wesley TeLinde was Dr. Howard Jones' boss and one of the country's top experts in cervical cancer. Unlike most doctors at the time, TeLinde believed that non-invasive cervical cancer could spread. Once it spread, it became deadly. He advocated radical surgery and aggressive post-operative surgery. Many experts felt his approach was extreme and unnecessary. TeLinde contacted George Gey and asked him to grow samples of cervical cancer tissue in his lab. One of these samples was Henrietta's.

Lawrence and Joe Lacks

Lawrence Lacks was Henrietta's eldest child. He was the spokesman for the family when people asked questions about Henrietta and her cells. He was very protective of his mother. He was the family member who decided with whom the family would talk. Joe Lacks was Henrietta's youngest child. He was only one when she died. He had many anger issues and served time in prison. He was dismissed from the army because of his emotional problems. Joe became a Muslim while in prison and changed his name to Zakariyya.

Stanley Gartler

Stanley Gartler was a geneticist who rocked the medical research world when he announced at a large gathering of culturists in September, 1966, that there was a technical problem in their field. Gartler had discovered that eighteen of the most commonly used cell cultures contained a rare genetic marker called G6PD-A which was almost exclusively found in black Americans. He concluded that the eighteen cell cultures contained HeLa contaminants.

Objects/Places

Cervical Cancer

Henrietta Lacks felt there was a “knot” in her lower torso. She finally went to the doctor and was diagnosed with a virulent form of cervical cancer. It was an invasive form of the cancer which was partly the reason her cancer cells were so robust.

Radium

Henrietta was treated with radium for her cervical cancer. She kept her condition from her friends and family. When she finally showed a friend her torso, the friend was shocked at the black and charred condition of Henrietta’s skin. Many experts believed that the type of treatment she received was too radical.

Public Ward

Henrietta was treated at Johns Hopkins Hospital in Baltimore. She was cared for in the colored section of the public ward. Henrietta didn’t have to pay anything for her treatments since she was a public ward patient. However, that status led doctors to believe that taking tissue samples from her without her permission was ethical.

Cultured Cells

A slice of Henrietta’s cancerous cervix was given to the tissue research lab in the hospital. There it would be placed in sterile vials, given nourishment and light and monitored for growth and vitality. Most cancer cells from the cervix were difficult to grow.

HeLa

George Gey who ran the tissue research lab at Johns Hopkins Hospital was astonished at the rate of growth and vitality of Henrietta’s cancer cells. The strength of these cells compared to other cultured cells had never before been seen in the history of medical and scientific research. The cells were dubbed HeLa. Ultimately, there were trillions of cells created from Henrietta’s original cell line. Private labs made millions of dollars from them.

Hybrid

In 1965, two British researchers created the first human-animal hybrid by fusing HeLa cells with mouse cells. In this process, it was discovered that cells regulate genes, which led to gene therapy. Researchers conducted fusion research which was a precursor to the human genome map. Hybrids were also used in developing cancer therapies and studying immunity in organ transplants.

Night Doctors

There were stories of “night doctors” for years in the black community. These doctors supposedly snatched black people off the street to use for lab research.

Informed Consent

When ethics concerns grew over the research use of cells, blood, and tissues from patients who had not given permission nor had any knowledge of what was being done with parts of their bodies, new standards were established in the field. One of these regulations was the “informed consent” form which explained what intentions the doctors had for the patient’s tissue or blood.

The HeLa Factory

The HeLa Factory was established by the National Foundation for Infantile Paralysis at the Tuskegee Institute in Atlanta. HeLa cells were cultured there by back scientists and technicians and distributed worldwide. The cells were susceptible to other diseases which made their use beneficial for many kinds of research. The cells were also useful in growing viruses like herpes, mumps, and measles.

HeLa Contamination

Stanley Gartler was a geneticist. In September of 1966, he announced at a large gathering of scientists that he had discovered a rare genetic marker called G6PD-A in 18 of the most common cell cultures. The marker was almost exclusive to black Americans. He concluded that the eighteen cell cultures contained HeLa contaminants.

Clover

After Henrietta's mother died, tending to nine children was too much for her father. He took Henrietta and her siblings to Clover where their relatives had been tobacco farmers since the days of slavery. He divided the kids up among several relatives. Henrietta lived with Tommy Lacks, her grandfather. Tommy was already raising another grandchild named David Lacks, whom Henrietta would eventually marry.

Turner Station/Lacks Town

Turner Station was the small town outside of Baltimore where Henrietta and David moved with their kids when he got a job at a steel mill. Turner Station was where many of the steel workers lived. The town was segregated. The Lacks family lived on the “other side of the tracks” in an area that came to be known as Lacks Town.

Baltimore

The job at the steel mill in Baltimore paid much better than what David earned as a tobacco farmer in the South. Baltimore was where Henrietta lived and worked and raised her children until her death in 1951.

Johns Hopkins Hospital

Johns Hopkins Hospital in Baltimore was one of the foremost hospitals in the country. Henrietta went there to seek treatment for the “knot” she felt in her lower abdomen. She was treated in the colored section of the public ward where her medical care was free.

Gey’s Lab

George Gey was the head of the tissue research lab at Johns Hopkins Hospital. He was given samples of tissue from public ward patients who were suffering from cervical cancer. A slice of Henrietta’s cancerous cervix was included in the samples he received.

Themes

Ethics

A strong theme that runs through the story of Henrietta Lacks and her “immortal” cells is one of ethics. It was 1951 when Henrietta felt a “knot” in her lower torso area. It wasn’t painful, but it was did exist. When it started to hurt, she finally went to the colored section of the public ward at Johns Hopkins University Hospital. Her “knot” was a tumor. When tested, it proved to be malignant. Henrietta was diagnosed with cervical cancer.

Patients who were treated in the public ward at Johns Hopkins Hospital did not pay for their treatment. Some doctors and professionals and the hospital felt it was acceptable to take tissues from these patients to use for research and study in the hospital lab. After all, they weren’t paying customers. Using their tissue was a form of payment for services. It was under these circumstances and this frame of mind among the medical field that a slice of Henrietta’s cancerous tumor was snipped off and given to the lab.

Was it ethical? At the time no one gave too much thought to the rights of ward patients, especially black ward patients. The scientists felt it was a positive in the advancement of medical research. What patient wouldn’t want to help others by allowing her tissue to be used? As time passed and Henrietta’s cells were the sensation of medical and scientific research worldwide, information about the patient was released to the public without the permission of Henrietta or her family. Eventually, Henrietta’s cells were bought by private labs who marked up the price and literally made millions on the cells which became known as HeLa cells.

When things came to a head twenty years later, the truth started to emerge. The patient who had been the original cell line for trillions of cells that were used in labs all over the world had not been aware that cells had been taken and had not given permission for their use. After she died, her family was in the dark about the use of their relative’s cells and had no idea of the magnitude of their use.

As a result of Henrietta Lacks and her prolific cancer cells, new standards were instituted in the world of medical research some twenty years after her death. Patients had to be informed of any intended use of their tissue which was referred to as “informed consent.” Years later, a judge in another case ruled that patients must be aware of any financial interests involved in the use of their tissue.

When Henrietta’s cells were taken from her there were no ethical standards about using them. But, her high-profile story brought about the first ethical standards that the medical professionals were forced to follow. Rights between a patient and her cells had been established.

Discrimination

Racism is a theme in “The Immortal Life of Henrietta Lacks.” When Henrietta became ill, she sought treatment in the public ward of Johns Hopkins Hospital. Even the public ward was segregated. There was a “colored section” in the ward where black patients like Henrietta had to go. There was a somewhat cavalier attitude on the part of doctors and scientists in that era. They had less compunction about violating the rights of black patients than they would have doing the same to white patients.

There had been a long-standing belief in the black community in Baltimore that there were “night doctors” who snatched black people off the street to use in research. They believed that Johns Hopkins was built in a poor, black neighborhood just for that reason – to have easy access to potential black research subjects. Although the extent of the fears was unfounded, there is documented evidence that blacks were used for medical research in the days of slavery. Even in more modern times, a top hospital like Johns Hopkins performed some questionable research with black subjects.

Medical research professionals mistreated Henrietta’s family. They didn’t know about the trillions of her cells that were circulating the globe until twenty years after her death. They had lied to them, kept them in the dark and ignored their questions once they found out. It was not a surprise that when Rebecca Skloot, author of the book, was met with distrust when she tried to meet with family members about the book.

Poverty

Henrietta Lacks started out in a poverty-stricken town in Virginia. Her life ended in a poverty-stricken area of Baltimore. She had been poor all her life. Working the tobacco fields in the hot sun in the South as a mere child, she learned early on that life wasn’t easy. As she matured, she saw that nothing much changed no matter where she lived. Climbing out of poverty was next to impossible.

Poverty and lack of education kept people like Henrietta down. The lack of education stemmed from poverty. Families needed their children to work to earn money to help support the family. Poverty also kept people like Henrietta from proper health care. When she fell sick, her lack of self-worth kept her from seeking early treatment. Her cancer was allowed to grow to the point that it was inoperable. When she did seek treatment, she was misdiagnosed and, perhaps, given the wrong treatment. She was a patient in the public ward which treated people too poor to pay. Did they get the same level of medical care as paying customers did?

When Henrietta returned, complaining of pain after her cancer had been treated, notes from several visits indicated that there was no recurrence of cancer. But, again she was misdiagnosed. The cancer had returned and soon took her life. She was misdiagnosed twice which may have contributed to her death.

The cycle of poverty in a family is difficult to escape. Henrietta's descendents were poor. When they found out that others were profiting from Henrietta's cells, they were astounded. Henrietta's daughter Deborah just wished she would have been given enough money to get health insurance.

Styles

Structure

“The Immortal Life of Henrietta Lacks” by Rebecca Skloot is divided into three main sections: Part one – Life; Part Two – Death; and, Part Three – Immortality. Both Part One and Part Two have eleven chapters. Part Three has sixteen chapters. The first section covers Henrietta’s life, including her childhood through her battle with cancer and her last days. The second section covers her burial and the proliferation of her cancer cells that had been taken by scientists and cultured and their impact on medical research. The third section deals with the aftermath of Henrietta’s treatment and the continuing mistreatment of her family.

The section “A Few Words about this Book” is followed by a prologue. The page “Deborah’s Voice” is written by Henrietta’s daughter, who expresses her feelings about her mother and her mother’s cells.

Following the last chapter, there is a “Where They Are Now” section which provides updates on family members and others involved in the story. One update is that HeLa is still one of the most commonly used cell lines in labs around the world. There is an “Afterword,” an Acknowledgements” section, a “Notes” section, and an “Index.”

Perspective

“The Immortal Life of Henrietta Lacks” by Rebecca Skloot is a non-fiction account of the story of a poor, black woman whose cancer cells became a major force in the world of medical research. Henrietta’s story is told from a reporter’s viewpoint. She gathered as much material and documentation as she could find and interviewed as many people involved in the case of Henrietta Lacks and her calls that she was able to locate.

Rebecca Skloot is an award-winning science reporter. She has written articles in many high-profile publications including The New York Times Magazine and O, The Oprah Magazine. In addition to writing non-fiction she has taught the technique at several universities. Since this author is a reporter and a fact-seeker, there is no indication that Skloot took any sides in her work. One thing that her book did accomplish was presenting Henrietta’s full story for the first time since her cells were taken to use in research in the early 1950s.

In section entitled, “A Few Words about This Book,” Skloot notes that she changed no names in the book and invented no characters or events. She conducted over one-thousand hours worth of interviews in her effort to uncover the whole story. She made every effort to write a complete account of Henrietta and her cells. She begs forgiveness for anything she omitted.

Tone

“The Immortal Life of Henrietta Lacks” by Rebecca Skloot is the story about how Henrietta’s cancer cells were taken from her without permission and used for study and research initially in the Johns Hopkins tissue lab. Naturally, since the book has a large focus on the medical and scientific research fields there are multiple references to diseases, lab processes and medical treatment methods. Some of the terms are common and easy to understand like “cervical cancer,” “chromosomes,” “radium,” “DNA” and “genetic markers.”

However, there are many terms and phrases that are not familiar. To most readers, they are tongue twisters. For example, terms like cytoplasm, hemophilia, epidermoid carcinoma, carcinoma in situ, metastasized, culture medium, polio virus, virology, culturist, somatic cell fusion, hybrid cells, glucose-6-phosphate dehydrogenase-A, cell lines, and many others are interspersed throughout the story. However, there is not an overuse of uncommon medical terms. Those that are included do not slow down the reading pace. The medical and scientific words are defined and explained within the context of the story.

Author Skloot also captures the beliefs and the manner of speech used by the Lacks family. The family was generally not well-educated and from the South. They imagined things about Henrietta and her cells They believed her cells were being used to clone other people. They also believed that Henrietta could be cloned from her own cells. They thought the doctors had injected Henrietta with cancer cells so they could use the cells. They felt that they, too, would contract the same form of cancer that Henrietta had.

Rebecca’s treatment of the Lacks family is always respectful. There is not a note of sarcasm in the accounts of her discussions with them.

Quotes

When she first started hurting, she thought it had something to do with… the bad blood David sometimes brought home after nights with other women – the kind doctors treated with shots of penicillin and heavy metals.
-- Henrietta/Author (Chapter 1)

Importance: Henrietta suffered from sexually transmitted diseases that she contracted from her roving husband. The passage captures the dysfunctional relationship that she had with her husband. It resulted in serious health risks.

Many scientists believed that since patients were treated for free in the public wards, it was fair to use them as research subjects as a form of payment.
-- Chapter 3 Dr. TeLinde/Author “Many scientists believed that since patients were treated for free in the public wards, it was fair to use them as research subjects as a form of payment.” This quote captures the mindset of scientists at the time when Henrietta’s cells were taken to be used for research. (Chapter 3)

Importance: This quote captures the mindset of scientists at the time when Henrietta’s cells were taken to be used for research.

The Geys were determined to grow the first immortal human cells: a continuously dividing line of cells all descended from one original sample, cells that would constantly replenish themselves and never die.
-- George & Margaret Gey/Author (Chapter 2)

Importance: This quote explains the impetus for taking Henrietta’s cells with plans to use them in research for years to come.

The reason Henrietta’s cells were so precious was because they allowed scientists to perform experiments that would have been impossible with a living human.
-- George Gey/Author (Chapter 7)

Importance: This quote explains the importance of Henrietta’s cells and why George Gey was eager to distribute them to scientists around the world.

Your cells will make you immortal.’ He told Henrietta her cells would help save the lives of countless people, and she smiled. She told him she was glad her pain would come to some good for someone.
-- George Gey/Author (Chapter 8)

Importance: A colleague reported the exchange between Gey and Henrietta. There is no record of Gey’s visit to Henrietta’s deathbed. If the visit did take place, it was the first time Henrietta was told that her cells were being used in research.

Not long after Henrietta’s death, planning began for a HeLa factory – a massive operation that would grow to produce trillions of HeLa cells each week. It was built for one reason: to help stop polio.
-- Author (Chapter 3)

Importance: This passage ostensibly describes the reason for the growing of millions of Henrietta’s cells.

It turned out Henrietta’s cells could float through the air on dust particles. They could travel from one culture to the next on unwashed hands or used pipettes; they could ride from lab to lab on researchers’ coats and shoes, or through ventilation systems. And they were strong; if just one HeLa cell landed in a culture dish, it took over, consuming all the media and filling all the space.
-- Stanley Gartler/Author (Chapter 20)

Importance: This passage describes the strength, dominance, and durability of Henrietta’s cancer cells.

I heard by the year 2050, babies will be injected with serum made from my mama’s cells so they can live to eight hundred years old.
-- Lawrence (Chapter 21)

Importance: Lawrence, Henrietta’s oldest child, tells Rebecca one of the wild predictions that floated around about his mother’s cells.

If they are willing, I wouldn’t mind to go back and get some more blood.
-- Susan Hsu (Chapter 23)

Importance: As a postdoctoral student, Susan Hsu drew blood from Henrietta’s children. Scientists wanted to use their genetic markers to learn if HeLa cells had contaminated other cultures. Hsu made the above comment fifty years after the first cells were taken. It illustrates how obsessed medical research was with Henrietta’s cells.

Several patients had successfully sued their doctors for privacy violations… But those patients had one thing going for them that Henrietta didn’t: They were alive. And the dead have no right to privacy—even if part of them is still alive.
-- Author (Chapter 26)

Importance: This quote captures the unique nature of the use by researchers of Henrietta Lacks’ cells.

The worst thing you can do to a sick person is close the door and forget about him.
-- Washington Post quote (Chapter 33)

Importance: The Washington Post article wrote about Crownsville where Elsie had been placed. Black patients were abused and mistreated at the facility. Deborah hadn’t forgotten about Elsie. She didn't know she had a sister. She would have gotten her out if she'd known. It was another Lacks family tragedy.

It's too late for Henrietta's children. This story ain't about us anymore. It's about the new Lacks children.
-- Deborah (Chapter 37)

Importance: Deborah had learned more about her mother, but it had been stressful for her. This quote demonstrates that she found resolution about her mother and was ready to move on.

Topics for Discussion

1

How did a difficult childhood lived in poverty affect Henrietta's later life? What role did the effects play in her reluctance to see a doctor about a “knot” she felt in her lower torso? After the death of her mother, Henrietta was sent to live with her grandfather. How did this impact the rest of her life?

2

What conditions did Henrietta face when she sought treatment at Johns Hopkins Hospital? Discuss how poverty and discrimination impacted the health and treatment of black patients.

3

How did most human cells fare during the lab culturing process? Explain how and why Henrietta’s cells were different than any cells that had ever been cultured.

4

Describe the HeLa Factory and why it was established. For what specific areas of research ere Henrietta’s cells used? What advancements were achieved through the use of Henrietta’s cells?

5

Who is Helen Lane? Why were scientists and doctors reluctant to reveal the name of the source of the HeLa cells? Was it unethical to use Henrietta’s cells? Why or why not?

6

What were hybrid cells. How were they created? What was the controversy over hybrid cells? What benefit did they provide medical research?

7

What were some of the beliefs that black people had about doctors, research, and hospitals? What was the basis of these beliefs? What evidence is there that there was truth to some of these beliefs?

8

What was the significance of geneticist Stanley Gartler’s revelation about the contamination of other cultures by HeLa? Describe the ways in which scientists could detect whether or not a cell was contaminated by the HeLa cells.

9

Why was Deborah and her family leery of reporters and scientists who asked them questions about Henrietta? Why were they most distrustful of white people? How did Rebecca build confidence in Deborah and the others after telling that she wanted to tell the truth about Henrietta? What other people were kind and helpful to the Lacks?

10

Johns Hopkins Hospital arranged to take blood samples from Henrietta’s children. What was the real purpose of this request? What did the Lacks family believe to be the reason? Why was there so much confusion over this incident?