

Chapter 1

Elizabeth

Blackwell

First American Woman Doctor

Introduction

The idea of Western society accepting the idea of women as medical doctors is fairly recent in America's history. In sixth grade I (the author) had a great interest in the human body and asked my science teacher how well I was doing in class. So he asked, "Why do you want to know?" I replied, "Because some day I'm going to be a doctor."

A girl sitting across from me heard this and frowned. She said in a loud whisper, "Girls can't be doctors!"

But they can. It took one woman to start the ball

rolling, to be the first to attempt it and be successful, to be among the first to start medical colleges just for women. That woman was Elizabeth Blackwell. Just what did it take to accomplish what she did in the mid to late 1800s? It's time to find out.

The Early Years

Elizabeth Blackwell was born in Counterslip near Bristol, England on February 3, 1821. As the third eldest, after sisters Anna and Marian, her help to mother Hannah in caring for her six younger brothers and sisters would become very important, perhaps why she helped the sick later on.

Her father, Samuel Blackwell, was well-to-do because he owned a sugar refinery. He thought differently from other men in the early 1800s. His Congregationalist church was like the Quakers; they

believed women and men were equal before God. So why not also provide an equal education for them? His daughters and sons both had tutors or special teachers to help them learn. They took lessons in math, philosophy, science, and German.

Samuel encouraged afternoon walks outside for his children. They developed a curiosity about things. When older sister Anna was given a telescope, Elizabeth and her brothers Sam and Henry grew very interested.

“Oh, do let me see it too! I want to see what’s out there!” Elizabeth exclaimed when Anna brought it out. They would gaze out at the stars and wonder about the big world out there.

Science was starting to really interest Elizabeth. But when their tutor showed her

the eye of a bull with its many muscles and **ligaments**, she was disgusted.

“Ew, that’s gross,” she told her siblings. Her brothers just smiled, thinking about putting a frog on her lap. Elizabeth, sometimes called “Bess,” continued to study hard despite her brothers’ antics.

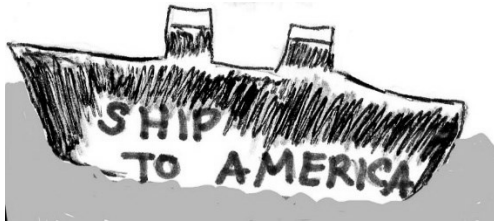
Her Aunt Barbara noticed her actions. “It’s such a pity such determination is wasted on a girl,” she said to Hannah.

“I’m sure our Bess will do well in life with her attitude,” her mother Hannah replied.

Times were beginning to change in England. Mill workers, who liked neither their low pay nor lack of property rights, were protesting. There was finally a workers’ riot. In anger,

they set buildings on fire, including Samuel Blackwell's refinery. It was totally destroyed; the family needed a change. They were going to America!

The family crowded onto a ship bound for New York City the summer of 1832, when Elizabeth was eleven years old. She turned a bit green during the trip.



“Not feeling well?” Her brother Sam asked.

“Not at all,” she said, looking away from the water.

“Try this.” Sam took a licorice stick out of his pants pocket. She didn't care for the taste much, but her

stomach calmed down a little. "Thanks," she said.

"Aren't you glad it wasn't a bull's eye?" her brother asked.

Although they enjoyed the exciting life of New York City, their dad Samuel wanted to grow sugar from sugar beets the way Napoleon had. He decided to move the family to Cincinnati, Ohio. After a few years he suddenly became ill with bilious fever, affecting his liver. He died August 7, 1837. Elizabeth was sixteen.

Now Hannah and her girls and boys had to be practical and make some money. Oldest sons Sam and Henry would have to find work. Hannah and her oldest daughters, Marian, Anna, and Elizabeth, would use their home as "The English and French Academy for Young Ladies," with

“teaching rooms” in their house. It was a way to make money, yes, but “Bess” felt a tug to do something else and told her brother Sam so. But what?

For a while Elizabeth taught for a family living in Kentucky, where slavery was legal. She found she didn’t approve of that or the women who sat around and were waited on. Courtship was more formal; she couldn’t find a man who could be her **better half** while there and put the idea of marriage out of her head.

Back in Cincinnati with family and friends, she paid a visit to an elderly sick friend, Mary Donaldson. Elizabeth sat with her dear friend awhile and listened to her, especially her unique idea.

“Why don’t you become a doctor?”

“Me, a doctor?” Elizabeth couldn’t help saying.

“If I’d had a lady doctor it wouldn’t be so embarrassing to have someone look at my private areas. It would help me feel better with a woman by my side.”

Elizabeth considered this. “I want to try this,” she decided. First, she’d have to find a medical college that would take her.

It was 1845, after all, and women were mostly expected to become wives and mothers, or attempt to make a living as a teacher or farm worker. Elizabeth decided to teach a while longer to save up for medical school.

Teaching Reverend John Dickson’s family in Asheville, North Carolina, came in handy. He had a

medical library she could read when she wasn't working. She wanted to learn all about the human body.

Was this too much of an adventure for a determined woman? She wrote in her diary she was ready to commit to becoming a doctor. It was a "moral cause" to her.

Soon, Elizabeth applied to medical schools on the East coast, in places like Philadelphia, New York, and Boston. But no one was interested. Twenty-eight schools said no! So, who could help her?

In May 1847, she boarded a ship in Charleston, South Carolina, for the trip up north, excited to give her medical future a try. She was to board with Dr. and Mrs. William Elder, encouraging Quakers who knew people in the

Philadelphia medical field. Maybe Elizabeth had a chance in that city.

She met with several doctors who also taught medical classes, to see if maybe they would let her be their student. They weren't too keen on the idea. She thought they were "tough nuts to crack." One of them actually suggested she wear men's clothes and sneak into a medical facility in Paris, across the ocean!

One doctor, Dr. Joseph Allen, allowed her to observe his medical classes. He even let her in the dissection room, where bodies are cut in pieces. Oh, but the blood! Dr. Allen took her aside to show her the human wrist. The wrist is a part of the body with many pieces: tendons, bones, and bluish veins under the skin. Yes, she noted, there was a wonderful arrangement of the muscle. She could see

the beauty of it, beyond the blood. She was getting less squeamish, less nervous about the real thing. The human body was a wonderful thing.

She sent her college application to one more place. Geneva Medical School.

The young men who attended this central New York medical school were happy-go-lucky, rowdy types. The college dean gathered them together and asked what they thought: should a woman be allowed to study medicine at our school?

“Class,” said the dean, “we need to all agree on this.” Most of the male students took this as a joke of some kind. They all voted her in.

Not long after that, Elizabeth received a letter

from the college in the mail, at the home of the Elders. She anxiously pulled up the envelope flap and read the letter. She put her hand to her mouth.

“They accepted me! I can go to medical school!”

She thanked the Elders for all their kind support and letting her stay with them, and left for Geneva on November 4, 1847. At age twenty-six, she would become med student number 130.

Was she really accepted? Some townsfolk gossiped and gave her mean looks, as though she were an unwanted **leper**. Some boarding house owners said, “No, you can’t stay here!” Luckily, she managed to find a place to live.

When Doctors Lee and Webster asked her what she had studied, Elizabeth

recited several courses, such as chemistry, biology, **physiology**, and Latin. She needed to get books and get settled in right away. School had already begun in September.



As
serious
as she
was
about

studying, her classmates were just the opposite. One time, a young man tossed a paper airplane toward her. It landed on her desk. All eyes around her wondered what Elizabeth would do. She tossed it aside, going back to taking down notes as their teacher spoke. Dr. Webster noticed. Maybe having a woman student was actually a good idea after all.

Yet she was still treated like an annoying girl. Dr.

Webster thought she would be “disruptive” in the dissection room, where they cut into a dead **specimen**.

“Why should I not be allowed in this class?” she demanded. “How can I help women as a future doctor if I don’t know how their bodies work? Who will they turn to if they don’t have me?”

Dr. Webster considered this. She did have a point.

“I will think about it,” he said. Later, he allowed her to assist during a woman’s **hernia** operation.

During a break from classes in 1848, she found work as a junior resident. She’d practice her doctoring skills at Blockley Almshouse.



(Photo courtesy of “No.273
13 Oct Sneeze” by *mcfarlandmo*,
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Blockley was a block like structure that housed the poorest of the poor in Philadelphia. She was there when Irish immigrants arrived in the U.S. weak from hunger. Many became very ill with typhus, which happens in poor city sections where there is less **sanitation**. The typhus was caused by certain bacteria in lice, the lice carried to the humans by fleas. Elizabeth found beds for the sick, took their temperatures, saw they drank plenty of fluids. She also decided to do a **thesis**

paper on her typhus experience.

Her second fall semester at Geneva College students seemed more pleasant, and they compared notes with her on various medical experiences.

When final exams rolled around Elizabeth studied and passed with flying colors. Her graduation ceremony was held at a church in town. The other students planned to walk through town, like they were in a parade. Elizabeth chose to stay out of the spotlight. On that cold January 23rd in 1849, the church was packed with family and lots of townspeople, including many women who saw this first female doctor graduate from a U.S. college. The male students were recognized first. Then the entire church and her brother Henry stood up to see

Elizabeth, in her dark dress, walk up to the stage to receive her diploma. They all cheered. Reporters noted this momentous event to the area.

At twenty-seven-and-a-half Elizabeth was now a celebrity, like a rock star. Yet, no one took her seriously. So, after visiting with family, she sailed to England, for more learning experience and possibly, a job as a doctor. As this “first woman doctor” she had the opportunity to observe some surgeries. American doctors provided an opportunity for Elizabeth to speak to French doctor Pierre Charles Alexandre Louis. Known for his work to find a cure for TB, a lung disease, he was not encouraging.

“Why don’t you be a midwife at La Maternite’?” he suggested. “Just a midwife?” she asked. She

was disappointed but had to start somewhere.

Getting There



La

Maternite was a huge hospital for young women and babies. There was a dormitory where Elizabeth would try to sleep alongside of giggly, noisy *études* or students, who learned about delivering babies and other medical procedures. Their days began early. She was up at 5:30 a. m. to see patients. She had to bathe them and change their bedding. Then she went on what are called “rounds” with supervisor Madame (Mme.) Charrier, with students giving reports on

the health of assigned patients. By seven they were back at the dorm for a small breakfast of biscuits or bread they bought.

Elizabeth also visited hospital wards at a nearby hospital, like the Salles St. Marie, assisting male doctors, around 8 a.m. Then there were classes. After classes, surgery could be observed later in the hospital's surgical theater. It was a very tiring schedule.

At Salles St. Marie she met a serious-minded young doctor in training, a Monsieur (M.) Philbert Hippolyte, who would be most helpful when she became ill. During one evening in early November 1849, Elizabeth, surviving on little sleep, was trying to give medicine to babies with ophthalmia, an eye disease. The syringe of fluid she was putting in the babies' eyes somehow squirted back into

her left eye. Later, it felt like she had an irritation in the eye, like sand. By the next day it was swollen shut. But the hospital director told her she had to keep working, doing her rounds.

That was impossible. She went to the student infirmary to rest. Soon, both eyes were swollen, and M. Hippolyte came over. He said he would attend to her needs, see if he could help her eyesight. M. Hippolyte tried the remedies of the time, like putting live leeches on the forehead, then cold compresses. The leeches, three inch long worms, would supposedly suck out poison.

After a few weeks it appeared the left eye would stay blind. She stayed a while longer in the hospital, then her sister Anna had her wrapped in veils to protect her eyes as Elizabeth went with her to Anna's Paris

apartment to rest. Later, Anna took her to a health resort in Germany that specialized in water treatments to get better.

After several months Elizabeth told her family it was sad she couldn't be a surgeon, which required so much accuracy. (Eventually the left eye was replaced with glass.) Traveling back to England, she visited London's St. Bartholomew's Hospital and spoke with nurse Florence Nightingale.

"The highest goal of health is sanitation," Florence told her. "Remember that, to prevent infection."

By July 1851, she was eager to get back to America and set up her own medical offices. She decided to go back to New York City, and the other women in her family would soon join her

there. Every hospital she went to, the male doctors said, “No, we can’t hire you.”

A friend helped pay for “consulting rooms” where she’d have some place to practice medicine and help someone, at least. She had a few patients, some immigrants, some Quakers, at her **dispensary** near Tompkins Square on East 7th Street. To add to her income, Bess held lectures or talks at Hope Chapel in a local church. These lectures were part of the first book Elizabeth later wrote, 1852’s *The Laws of Life with Special Reference to the Physical Education of Girls*.

But it was all work and no play. Elizabeth grew very lonely living in New York and needed someone special in her life. She went to Randall Island Orphanage, near New York City, and

came upon a wonderful little red haired girl.

Being short herself, it was easy to bend down to the level of this seven-year-old.

“Hello, how are you? My name is Elizabeth Blackwell. What’s yours?” she said to this little girl standing against a wall and holding a ratty handkerchief.

“Kitty Barry.”

“Kitty – oh, I like that name. Tell me, have you been here very long?” Kitty nodded, her red waves going up and down.

“Does it get lonely for you? Sometimes, I get lonely too.” She gave Kitty a doll with a white dress and ceramic head she had hiding behind her, which the child hugged to her chest. Kitty Blackwell would soon be adopted, becoming Elizabeth’s constant

companion, secretary, and assistant for the next fifty-six years. And they had work to do. Sister Emily was graduating from a medical college in Cleveland. They both needed a place where they could help a lot of people. Elizabeth decided they would raise money for their very own hospital for women and children right in New York.

Then someone showed up on her doorstep who could help their medical practice even more. A German woman, Marie Zakrzewska, was told she should see Elizabeth about a job as a doctor. Marie had only been allowed to be a midwife in Europe, like Elizabeth, but was encouraged to come to America, working in a factory for a while.

“You will need more medical training,” Elizabeth, interested in the highest

standards, pointed out. She had some liberal supporters and came up with money to send Marie for more training at Emily's college, (Case) Western Reserve University. Other medical schools for women were opening up, but they would need a place to practice what they knew once they left college.

A hospital, to be outfitted with equipment to deliver babies and help ill women who needed operations, would cost around ten thousand dollars. Boston Doctor Harriet Kezia Hunt, who had been tutored by others, came up with two thousand dollars. Quaker friends also raised money.

Making a Difference

The New York Infirmary for Women and Children opened on 58 Bleecker Street on May 12, 1857, Florence Nightingale's thirty-seventh

birthday. They renovated an old house, with rooms for surgery, babies, and sick beds; nursing students would also assist them. Emily, Marie, and Elizabeth worked around the clock, with no days off, helping poor women and children. The New York government saw the value of their work and eventually began paying for them to help the indigent or poor. New York Tribune newspaper editor Horace Greeley praised their efforts.



With the hospital in good hands, Elizabeth took a trip back to England in 1859. She saw family and lectured in several cities and health institutes. That year England put her name in the national registry of doctors, a first for a woman physician.

When she returned she learned Marie Zakrzewska had left! She wanted to start her own medical practice and hospital, up in Boston.

More medical women would be needed soon: the Civil War in America had begun.

There were still very few things that could be done for soldiers injured during the Civil War years (1861-1865). Many men would die (620,000), from injury, accidents, or disease. There was little knowledge about infection and how to do battlefield surgery. Elizabeth thought back on

Florence Nightingale's concerns about cleanliness and disease. She worked with others to help start the National Sanitary Association, partly an outgrowth of the U.S. Sanitary Commission supported by President Abraham Lincoln.

Part way through the war, New York City experienced a riot. It all started with the Emancipation Proclamation, where President Lincoln announced black slaves were now free. This upset some city residents, mostly Irish immigrants afraid they'd lose their jobs to black men moving north. News articles "fanned the flames" of prejudice and fear. When the first military lottery was held as part of the military **draft** on July 13, 1863, angry New York City residents took to the

streets and set government buildings on fire.

Elizabeth had finished putting a cool cloth on a woman's forehead and examining her sprained arm when Kitty rushed into the room. Emily soon followed.

"There is a riot in the city! They even burned down a black orphanage!" Emily cried. "What should we do?" Kitty looked on, afraid.

"We shall stand our ground. Our patients, our work must continue," Elizabeth said. She instructed Emily and Kitty and a few nurses to make certain all the window curtains were drawn and the shades brought down, especially for black patients. By July 16, army troops arrived to stop the city looting and mayhem. Over one hundred people had

been killed, but the hospital was not harmed.

By 1869, Elizabeth Blackwell had accomplished a lot. She'd opened a hospital and encouraged higher standards for treating patients. The New York legislature voted to allow a medical college be connected to her Bleeker Street hospital (which later moved to 126 Second Avenue). Elizabeth and Kitty decided to sail to England one more time, with Emily in charge of the hospital.

Did you know? Dr. Rebecca Cole, the second African American woman (1846-1922) to become a doctor, was an intern (practice doctor) at the Blackwells' New York Infirmary. Later, she moved to So. Carolina,

then D. C. to help patients.

Back in the country where she'd grown up, Elizabeth and Kitty set up a household in Hastings, on the English coast. She lectured at the London Medical College, promoted clean conditions in public places, and wrote a few books. She wrote *Pioneer Work on Opening the Medical Profession to Women* (1895) to explain her life's work and philosophy.

She died of a stroke in Hastings on May 31, 1910, at 89.

According to the Henry J. Kaiser Family Foundation, there are now (in 2017) over 313,000 women doctors in America, 168 years after Elizabeth became one. The Second Avenue hospital is no longer open, but there are over

twenty hospitals in New York City today.

Glossary

Better half: A person's husband, wife, or partner.

Dispensary: A clinic or big room where medicines are handed out to the sick. **(The)**

Draft: Military service that is required or ordered by the government. **Hernia:** A

weakness in the abdomen that allows organs in the body to stick out of it.

Leper: A person with leprosy, a disease that causes skin problems and disfigurement, caused by a certain bacteria. **Ligaments:**

Tough, flexible connective tissues that join bone to muscle or hold organs in place in the body.

Physiology: How the internal human body works.

Sanitation: Promoting good hygiene or clean conditions with rules to keep people or

areas clean, free of germs.

Specimen: An animal, plant, or mineral used as an example of its kind to look at and study.

Questions To Think About/Discuss

1. Did Elizabeth Blackwell live during a time of great change? How do you know?
2. Why do you think men doctors didn't want to work with her?
3. Was family support important to Elizabeth in her career?
4. How come doctors have 12 years of training now, as opposed to two for Elizabeth?
5. What would be the benefits of being a doctor today?

Read More About It

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NEXT UP: AMERICA'S
FIRST FEMALE
ASTRONAUT



Chapter 2

Sally Ride

**First U. S. Woman in
Space, Physics
Professor**

Introduction

Millions were glued to their TV sets as the Houston, Texas Mission Control counted down for the space shuttle liftoff.

“That’s 5- 4- 3- 2-1. And
ignition. We have ignition.
And liftoff of STS-7 and the
first America