

Landmarks in medicine. 3 famous women.

Teacher's notes

Extra Information.

1. Florence Nightingale.

Famous for her work in the military hospitals of the Crimea, Nightingale established nursing as a respectable profession for women.

Florence Nightingale was born on 12 May 1820, and named after the Italian city of her birth. Her wealthy parents were in Florence as part of a tour of Europe. In 1837, Nightingale felt that God was calling her to do some work but wasn't sure what that work should be. She began to develop an interest in nursing, but her parents considered it to be a profession inappropriate to a woman of her class and background, and would not allow her to train as a nurse. They expected her to make a good marriage and live a conventional upper class woman's life.

Nightingale's parents eventually relented and in 1851, she went to Kaiserswerth in Germany for three months nursing training. This enabled her to become superintendent of a hospital for gentlewomen in Harley Street, in 1853. The following year, the Crimean War (Britain, France and Turkey fought against Russia) began and soon reports in the newspapers were describing the desperate lack of proper medical facilities for wounded British soldiers at the front. Sidney Herbert, the war minister, already knew Nightingale, and asked her to oversee a team of nurses in the military hospitals in Turkey. In November 1854, she arrived in Scutari in Turkey. With her nurses, she greatly improved the conditions and substantially reduced the mortality rate.

She returned to England in 1856. In 1860, she established the Nightingale Training School for nurses at St Thomas' Hospital in London. Once the nurses were trained, they were sent to hospitals all over Britain, where they introduced the ideas they had learned, and established nursing training on the Nightingale model. Nightingale's theories, published in 'Notes on Nursing' (1860), were hugely influential and her concerns for sanitation, military health and hospital planning established practices which are still in existence today. She died on 13 August 1910.

->http://www.bbc.co.uk/history/historic_figures/nightingale_florence.shtml

2. Marie Curie.

Marie Curie was a Polish-born physicist and chemist and one of the most famous scientists of her time. Together with her husband Pierre, she was awarded the Nobel Prize in 1903, and she went on to win another in 1911.

Marie Skłodowska was born in Warsaw on 7 November 1867, the daughter of a teacher. In 1891, she went to Paris to study physics and mathematics at the Sorbonne where she met Pierre Curie, professor of the School of Physics. They were married in 1895.

The Curies worked together investigating radioactivity, building on the work of the German physicist Roentgen and the French physicist Becquerel. In July 1898, the Curies announced the discovery of a new chemical element, polonium. At the end of the year, they announced the discovery of another, radium. The Curies, along with Becquerel, were awarded the Nobel Prize for Physics in 1903.

Pierre's life was cut short in 1906 when he was knocked down and killed by a carriage. Marie took over his teaching post, becoming the first woman to teach at the Sorbonne, and devoted herself to continuing the work that they had begun together. She received a second Nobel Prize, for Chemistry, in 1911.

The Curies' research was crucial in the development of x-rays in surgery. During World War One Curie helped to equip ambulances with x-ray equipment, which she herself drove to the front lines. The International Red Cross made her head of its radiological service and she held training courses for medical orderlies and doctors in the new techniques.

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Despite her success, Marie continued to face great opposition from male scientists in France, and she never received significant financial benefits from her work. By the late 1920s her health was beginning to deteriorate. She died on 4 July 1934 from leukaemia, caused by exposure to high-energy radiation from her research. The Curies' eldest daughter Irene was herself a scientist and winner of the Nobel Prize for Chemistry.

- http://www.bbc.co.uk/history/historic_figures/curie_marie.shtml

3. Elizabeth Blackwell.

Elizabeth Blackwell, born in 1821, was the first woman doctor in the United States. She was also the first woman to be entered into the Physicians' Register in the UK.

She was born in Bristol, England in 1821. At that time it was not common for girls to receive a proper education. They were taught good manners and useful household and social skills. They were not considered as anything more than homemakers. Elizabeth Blackwell's father, Samuel Blackwell, had different views. He thought girls should receive the same education as boys. Elizabeth, her four sisters and her four brothers all received the same, extensive education.

Samuel Blackwell was against the Church in England. He also suffered business losses. He decided that he should move with his family to America. In 1832, the family immigrated to America. The entire family became involved in the abolitionist movement. They even hid escaping slaves in their home. Samuel Blackwell was unable to make much money. By the time he died, in 1838, there was very little left for his family to live on. Elizabeth, along with two of her sisters, started a small private school for girls, to help bring in money.

Elizabeth was interested in becoming a doctor. She was convinced that women would rather see a female, than a male, about their health problems. She studied medicine, privately, while teaching. At the same time she applied to medical school. Over twenty medical schools rejected her. It was unthinkable for a woman to become a doctor. Elizabeth didn't give up her dream, though. Finally, she was accepted by Geneva Medical School, New York, in 1847. It was supposed to be a joke. The male students were asked to vote on whether she should be allowed in or not. They voted yes because they thought she could never succeed, and they would teach her a lesson. Elizabeth didn't see it that way. She studied hard and graduated first in her class, receiving her degree in 1849.

She returned to Pennsylvania and worked in the hospitals there. During that time she became a naturalized US citizen. She wanted to become a surgeon, and travelled to Paris hoping to train with the great surgeons there. Again she was refused admission to the medical community. Instead she enrolled in the Midwifery School. She attended to women and sick infants. She accidentally infected her own left eye while treating a baby with a severe eye infection. This resulted in the loss of her eye that was later replaced with a glass eye. She also lost all hope of becoming a surgeon.

She then moved onto London and trained under Sir James Paget. All of her training could not get her a job in a private practice in the States. No man was going to take in a woman associate. Since she couldn't get into an established practice she decided to set up her own, with her sister Emily. Emily was following Elizabeth into medicine. She was having an even harder time than Elizabeth finding a college that would accept her.

Elizabeth rented a house and set up her private practice in it. She slowly began to get patients. Two years later she opened a dispensary for poor women and children in a slum area of Manhattan. Emily eventually graduated from medical school and joined Elizabeth. Together they opened the New York Infirmary for Indigent Women and Children. Many other newly graduate women doctors did their training there.

In 1858, Elizabeth returned to England. She became the first woman to be entered on the Physicians' Register there. She gave lectures on education reform, and inspired Elizabeth Garrett Anderson to take up medicine. Garrett Anderson was a pioneer of women doctors in England. She opened a hospital like the one Elizabeth Blackwell had opened in New York. That hospital remained open until very recently (about 1980).

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Elizabeth returned to America just in time to see the beginnings of the Civil War. Elizabeth and Emily helped train nurses for the Union Army. Elizabeth was appointed head of the Sanitary Commission by President Lincoln. At the beginning of the Civil War very little was understood about hygiene and how it affected health. Elizabeth was one of the first to understand how hygiene helped prevent the spread of infection. In 1868 the Women's Medical College opened in New York, next to the Infirmary. Elizabeth was Professor of Hygiene.

The following year, Elizabeth left Emily in charge of the infirmary and college and returned to England, to repeat her American success there. She did so, with famed Crimean War nurse Florence Nightingale opening the Women's Medical College. She continued to champion women's rights, especially in the growing movement for women's right to vote. Her friends and extended family members included suffrage movement leader Lucy Stone.

She died in 1910, at the age of 89 in Hastings, England. By the time she died female doctors were accepted in England and the United States. The Women's Medical College had closed as regular colleges were accepting female students. There were 7,000 female doctors in the States. She had paved the way for them all!

- http://www.funsocialstudies.learninghaven.com/articles/elizabeth_blackwell.htm