

Merit Ptah:
The First Female Physician

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Merit Ptah is the first female scientist and physician known by name in ancient history.¹ She lived around 2700 B.C, in ancient Egypt. Merit Ptah triumphed in her society by becoming the chief doctor for her pharaoh, through her discoveries that saved the lives of many of her people from tragic illnesses and injuries, and by earning respect for female scientists to make progress toward equality for women in the future. Her contributions not only to the field of science but to history, give us the foundation to today's medical and scientific works.

Society towards Females in Medicine Before Merit Ptah

Medicine was a developing field in the days before Merit Ptah. There was very little information on science in general, especially because of all of the spiritual and cultural beliefs of the people. Culture commonly twisted scientific knowledge, and made it very difficult to find the effective cures for the common diseases the societies faced.

In most parts of the world, any woman found practicing medicine in any way, faced a death penalty.² Laws for medical practice varied from location to location, and every society had its own set of laws, expectations, ideas, and stereotypes. However, in all of these locations with medical professions, women were not usually expected, nor encouraged to thrive in the medical field. There were limited opportunities for the proper education, and few had the will and desire to pursue the available training and education because of the discouragement they faced.

Ancient Egypt was one of the most advanced civilizations of their time period. They had a fully developed system of writing and a number system, which allowed them to make calculations and record ideas. They had an organized economy, a system of government, and a

¹ Klimczak, Natalia. "*Feminism and the Battle for Women's Rights in Ancient Egypt.*" Ancient Origins, Ancient Origins, 25 Sept. 2018

² Mark, Joshua J. "*Female Physicians in Ancient Egypt.*" Ancient History Encyclopedia, Ancient History Encyclopedia, 15 Jan. 2019

settled population. This stability gave medical research an opportunity to develop.³ In their societies, women were almost equal to men in terms of rights, respect, and protection. They were allowed and encouraged to do a lot of the same things as the men in their society, and they were allowed to get an education. Even Queen Hatshepsut started many medical schools, and encouraged women to learn medicine. Because of this, many scientists and aspiring physicians went to co-ed medical schools throughout Egypt, and many people were making medical advancements during this time. Though surprising, seeing a female physician was a fairly common thing in Ancient Egypt, the medical field was still obviously ruled by men. Women were able to practice medicine more frequently because of the work of a few notable figures, who were able to help break ground for women to become physicians.

The Medical Field in Ancient Egypt Before Merit Ptah

The people of Ancient Egypt were very strong in their cultural and spiritual beliefs. Heka, the god of magic (and because of this, the god of medicine)⁴, was believed to be in control of the health of the ancient Egyptian people. They believed that sickness was a punishment brought by Heka, as an attack from a demon or ghost that he sent.⁵ The Egyptians believed that the body was a system of channels, that all begin at the heart. Their physiology concepts were based on the idea that the heart is the source of human life. They believed that the heart held emotions, and controlled the routes the channels took throughout the body in order to complete

³ Brazier, Yvette. "Ancient Egyptian Medicine: Influences, Medical Practice, Magic, and Religion." *Medical News Today*, MediLexicon International, www.medicalnewstoday.com/articles/

⁴ "Heka." *Ancient Egypt Online*, ancientegyptonline.co.uk/heka/.

⁵ Mark, Joshua J. "Egyptian Medicine." *Ancient History Encyclopedia*, Ancient History Encyclopedia, 13 Jan. 2019, www.ancient.eu/Egyptian_Medicine/

the body's functions. They believed that the causes of disease or infections were Heka's demons blocking the channels. Therefore, treatments were often efforts to unblock the channels, so that the patient would be able to recover from the infection. The treatments often included spells, rites, herbal treatments and incantations, though the doctors did not have the ability to banish the illness entirely⁶

Ancient Egyptian doctors were often considered "magicians"⁷ as they supposedly dealt with the supernatural, while they cured diseases with spells or other religious rituals. These "treatments" were not effective in treating these illnesses, and as a result, many lives were lost. However, as time continued, more physicians gained medical and scientific knowledge from experience, and they began to treat illnesses and injuries more efficiently and successfully. For example, the ancient Egyptians preserved their dead in mummies. The mummification process required the removal of many organs such as the brain, liver, stomach, intestines, and the lungs. When they removed these organs, they began to gain knowledge of how the body worked, and what components were necessary for the survival of a human. This sparked the earliest physiological research, and the first step for the development of the medical field.

Evidence of Tragedies in Ancient Egypt

In Ancient Egypt, many of the first physicians and scientists did not have the same knowledge and information about anatomy and medicine as we do today. As a result, many illnesses and injuries were not treated properly and resulted in the loss of many lives. Ancient skeletons from this time period were analyzed for evidence of disease or causes of death that

⁶ "Ancient Egyptian Medicine In Sickness and in Health: Preventative and Curative Health Care." *Travel in Ancient Egypt*, 2010

⁷ Mark, Joshua J. "Egyptian Medicine." *Ancient History Encyclopedia*, Ancient History Encyclopedia, 13 Jan. 2019

were related to problems with their health. After many studies and tests on the skeletons, it was evident that many of the Ancient Egyptians died of various illnesses and injuries.⁸ Most of the common causes of death seemed minor by today's medical standards yet, they were left untreated, or they were not treated properly.

Among these illnesses was Anaemia, an illness caused by the deficiency of red blood cells in the bone marrow, where the bones grew weaker over time. Though this is not necessarily a cause of death, it left the body vulnerable to more diseases. Arthritis, is an ongoing injury that happens when the cartilage at the ends of your bones begins to wear away, and your bones cause friction, and eventually wear away as well. Worn teeth and cavities were commonly left untreated and Abscesses were left undrained leaving the harmful chemicals inside the body eventually killing many ancient people. Tuberculosis was also a major killer because the treatments required to cure it were not invented yet. Polio is a disease in the nerves, that eventually lead to nervous system failure, and as a result, death. Leprosy is a skin condition that results in disconfigurations, though not deadly on its own, this made daily life hard for the Ancient Egyptians, and left the body more vulnerable to more serious diseases. Tumors were also common, as they are today. However, there were no cures for them in ancient times, so the toxic cells eventually spread throughout the body, and killed the patient. Cleft Palate was also common in the roof of the mouth, and made eating difficult for patients. The open wound got contaminated, and eventually killed the patient. The lack of available treatments were the reason for most of the deaths in ancient Egypt. Fortunately, we had a new generation of physicians and research to increase the mortality rate of the later people of the ancient Egyptian civilization.

⁸ Filer, Joyce M. "History - Ancient History in Depth: Health Hazards and Cures in Ancient Egypt." BBC, BBC, 17 Feb. 2011



Detail of anaemic lesions in the eye sockets of a child⁹



Worn teeth of an ancient Egyptian showing an abscess drainage hole¹⁰

⁹ Filer, M Joyce. *Details of anaemic lesions in the eye sockets* “BBC-History-Ancient History in Ancient Egypt,” *BBC*, February 17, 2011
http://www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

¹⁰Filer, M Joyce. *Worn teeth of an ancient Egyptian showing an abscess drainage hole* “BBC-History-Ancient History in Ancient Egypt,” *BBC*, February 17, 2011
http://www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

Merit Ptah's Triumph Over the Illnesses

Merit Ptah helped her society overcome the numerous illnesses and injuries that would have otherwise taken the lives of many of her people. She was the first woman noted in the field of science and medicine for her research and contributions to medicine. More research was done on the skeletons from Merit Ptah's time period, and after her lifetime of medical practice, the illnesses that took the lives of many Egyptians, began to become less evident. Fewer skeletons had identified illnesses that were seen in previous studies. Therefore, more people benefited from the new medical advancements that Merit Ptah helped make possible. During her lifetime, she was able to gain more knowledge for the medical field, so that more people could survive through illness even after her death. Her research was passed down through the generations, and the mortality rate of her people greatly increased.

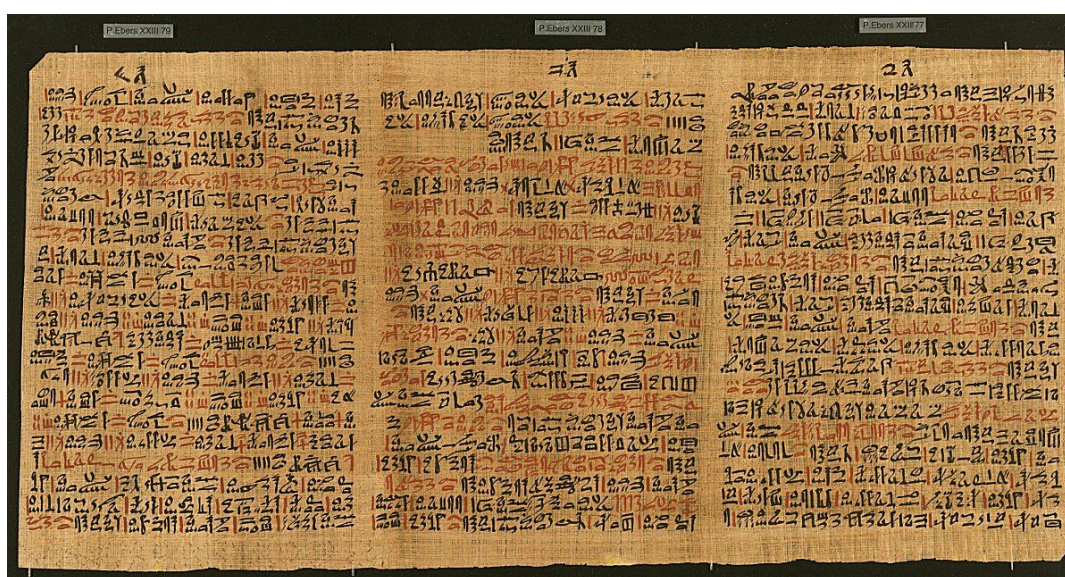
Merit Ptah was able to triumph as a female physician, in a world where medicine was new and undeveloped. She was able to prove her worth as a female scientist, and she was seen as an inspiration by many of her people. This is evident in an inscription on her tombstone, and it shows how her work had an impact on her people. Her son, who was a high priest, wrote that she was a "Chief Physician"¹¹ because of all of her hard work in her lifetime. Merit Ptah conducted a lot of research to help the medical field advance, and her knowledge helped save the lives of many and provided a foundation for today's medical practices.

The Medical Field after Merit Ptah

In addition to the effects Merit Ptah had on her people during her time, the field of medicine began to evolve and advance even after her lifetime. Evidence from the Ebers Papyrus

¹¹ "History of Scientific Women." *Herrad of LANDSBERG*, scientificwomen.net/women/ptah-merit-83.

shows that the cultural traditions of the ancient Egyptians still affected their approach to medical treatments. Spells and incantations were still considered more potent treatments than medicine or the physical repairment of organs until around 1500 B.C. Slowly, and over the course of time and research, science guided medical procedures and physiological knowledge. The Edwin Smith Papyrus was written at about 1500 B.C., and it is the oldest ancient text to show evidence of scientific research guiding a surgery, without the influence of cultural traditions.



Ebers Papyrus¹²

Dr. Merit Ptah's Significance

The people of Merit Ptah's society had much respect for Merit Ptah and medicine after Merit Ptah's life. The world immediately had more knowledge about the human body, and the treatments necessary to treat the illnesses that Egypt faced everyday. She taught the physicians under her about these treatments and causes for illness. This knowledge was passed down

¹² Ebers, Georg. *Ebers Papyrus* circa 1600 B.C, purchased 1873, *University of Leipzig* <https://www.uni-leipzig.de/en/university/structure/museums-and-collections/egyptian-museum/>.

through the generations to save the lives of more people, as well as advance the medical field so that more could be saved in the future. More of the population during her time survived sicknesses after her work. Much later, more female physicians gained the courage to fight for their right to pursue their passions in the scientific and medical fields, after the work of Merit Ptah.

Today, Merit Ptah is remembered as the first female physician and scientist. Her work serves as the foundation for medicine today, so that our generation of physicians can save the lives of people suffering from disease. She provided us with knowledge about the human body and the treatments that are effective in treating diseases and injuries. Merit Ptah also helped gain respect for females in the scientific and medical field. She encouraged females to pursue their passions for science, no matter what other people think, or no matter how many people will stand with you in what you believe in. Though today there are still fewer female scientists than men, women have made great progress in equality in careers, and towards being accepted in the science field.

Today, it is easy to take contributions from ancient history for granted. Human history's development owes so much for the trials and tribulations, as well as the triumphs and tragedies, of the ancients. Merit Ptah is not remembered casually for her contributions, but without her early efforts those such as Edward Jenner, Louis Pasteur, Jonas Salk, and countless others would not have been able to advance medicine to the level of preventing disease and increasing the quality of life and life expectancy. Today, we also remember Dr. Merit Ptah for her contributions toward equality for women in the science field, not just in her time, but in today's world as well- which continues to be challenge for women to this day. Though, women have

made great strides in all fields in the last century, it is quite special and unique that Merit Ptah accomplished this so early in human history.

Annotated Bibliography

Primary Sources

“Chief Physician” was a quote that exists on Merit Ptah’s tombstone today.

Ebers, Georg. *Ebers Papyrus* circa 1600 B.C, purchased 1873, *University of Leipzig*
<https://www.uni-leipzig.de/en/university/structure/museums-and-collections/egyptian-museum/>.

Accessed February 27, 2019

I used this source to gain information on the medical field after Merit Ptah’s lifetime. This information can be found in “The Medical Field After Merit Ptah,” section of my essay.

Smith, Edwin. *Edwin Smith Papyrus* circa 1500 B.C, purchased 1862, *Cybermuseum of Neurosurgery* <http://www.neurosurgery.org/cybermuseum/pre20th/epapyrus.html>. Accessed

February 27, 2019

I used this source to gain information of the medical field and its new scientific developments after Merit Ptah’s lifetime. This information is evident in “The Medical Field After Merit Ptah,” section of my essay.

Secondary Sources

“Agnodice: The First Female Physician...Maybe.” Classical Wisdom Weekly,
classicalwisdom.com/people/agnodice-first-female-physician-maybe/

I used this source to gain information about significant people and events that shaped the way Merit Ptah’s society treated female physicians. This information is evident in my project when I describe the background of the medical field for women.

Ancient Egyptian Medicine,
www.ancient-egypt-online.com/ancient-egyptian-medicine.html.

I used this source to gain information on the ways that the ancient Egyptians dealt with illnesses and infections. I learned about their herbal treatments and magical treatments for their daily health issues, and the effects the treatments had on the ancient Egyptian people.

“Ancient Egyptian Medicine In Sickness and in Health: Preventative and Curative Health Care.” *Travel in Ancient Egypt*, www.reshafim.org.il/ad/egypt/timelines/topics/medicine.htm.

I used this source to learn about the Egyptian medical beliefs. This helped me understand the medical society during this time period.

Brazier, Yvette. "Ancient Egyptian Medicine: Influences, Medical Practice, Magic, and Religion." *Medical News Today*, MediLexicon International, www.medicalnewstoday.com/articles/

I used this source to gain information on the beliefs of the ancient Egyptians in the area of medicine. I learned about the treatments they used to heal infections and illnesses, as well as some of their cultural practices that involved connections between the gods and their health.

"FAMOUS WOMEN OF THE ANCIENT WORLD." A Brief History of Poland, www.localhistories.org/ancientwomenfam.html

I used this source to get ideas for my topic, and to gain basic information on Merit Ptah. This was the starting point for this project, and the basic facts mentioned about Merit Ptah are evident throughout my project.

Filer, Joyce M. "History - Ancient History in Depth: Health Hazards and Cures in Ancient Egypt." *BBC*, BBC, 17 Feb. 2011, www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

I used this source for evidence on the tragedies that affected Merit Ptah's society. I learned about the illnesses that commonly took the lives of many of the Egyptian people.

Filer, Joyce M. *Details of anaemic lesions in the eye sockets* “History - Ancient History in Depth: Health Hazards and Cures in Ancient Egypt.” *BBC*, BBC, 17 Feb. 2011, www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

http://www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

I used this image for evidence of tragedy in ancient Egypt. This image depicts evidence of lesions in the eye socket of a child.

Filer, Joyce M. *The worn teeth of an ancient Egyptian showing an abscess drainage hole* “History - Ancient History in Depth: Health Hazards and Cures in Ancient Egypt.” *BBC*, BBC, 17 Feb. 2011, www.bbc.co.uk/history/ancient/egyptians/health_01.shtml.

I used this image for evidence of tragedy in ancient Egypt. This image depicts the result of an untreated abscess in the mouth of an ancient Egyptian.

“Hats off to Dr Merit-Ptah.” *Suneel Dhand*, suneeldhand.com/2012/07/21/hats-off-to-dr-merit-ptah/.

I used this source to gain information about the significance of Merit Ptah. I learned about the ways that she was important to her generation, as well as today’s generation.

“Heka.” *Ancient Egypt Online*, ancientegyptonline.co.uk/heka/.

I used this source to gain information about the Egyptian god of magic and medicine, Heka. This information is found in my historical context of my essay, and it helped me understand the cultural traditions of the ancient Egyptians, and how they influenced their medical practice.

History of Scientific Women.” *Herrad of LANDSBERG*,
scientificwomen.net/women/ptah-merit-83.

I used this source to gain basic information about Merit Ptah. I learned that she was respected by her son, and her society after her death.

Klimczak, Natalia. “Feminism and the Battle for Women's Rights in Ancient Egypt.”
 Ancient Origins, Ancient Origins, 25 Sept. 2018,
www.ancient-origins.net/history-famous-people/feminism-and-battle-women-s-rights-ancient-egypt-005895

I used this source to gain information about Ancient Egypt’s society. I learned that women were very powerful in Egypt, and had the power to shape history as much as the men did in this time.

Mark, Joshua J. “Egyptian Medicine.” Ancient History Encyclopedia, Ancient History Encyclopedia, 13 Jan. 2019, www.ancient.eu/Egyptian_Medicine/

I used this source to gain background on the progress of the medical field (scientifically speaking) in Ancient Egypt. I learned that in Ancient Egypt (before about 4th century B.C) their medical practices were considered advanced for their time, and would not be surpassed until after the fall of Rome, and even then these new progressions would be inspired by the work of the Egyptians.

Mark, Joshua J. “Female Physicians in Ancient Egypt.” Ancient History Encyclopedia,

Ancient History Encyclopedia, 15 Jan. 2019,

www.ancient.eu/article/49/female-physicians-in-ancient-egypt/

I used this source to gain information about the significant female physicians in ancient Egypt. I learned that women were encouraged to pursue medicine in Ancient Egypt.

“Mummies in Ancient Egypt and the Process of Mummification.” *History*, 25 Apr. 2018,

www.historyonthenet.com/the-egyptians-mummies.

I used this source to gain information on the mummification process the Egyptians used. From this, I was able to get an understanding of what the ancient Egyptians knew about physiology based on what they were exposed to.

Temple-Wood, Emily. “It’s Time These Ancient Women Scientists Get Their Due - Facts So Romantic.” *Nautilus*, 12 Apr. 2016,

nautil.us/blog/its-time-these-ancient-women-scientists-get-their-due.

I used this source as a place to get ideas for my topic. I was very interested in the accomplishments of women in Ancient history (particularly in the science field) and I got inspiration from this site.

The World Book Encyclopedia, 2001. World Book, 2001.

I used this source to gain background information about the Ancient Egyptian society, and early medicine in ancient times.