## **Ancient Egyptian Healers**

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Before the decipherment of the Rosetta stone in 1822, most information about ancient Egyptian medicine came from Greek historians and physicians, especially the historian Herodotus who visited Egypt around 440 BC. Other Greeks who extensively wrote about ancient Egyptian medicine include Hippocrates (460-370 BC); the two physician anatomists, Herophilos (335-280 BC) and Erasistratus (310-250 BC), who jointly founded the famous medical school in the Egyptian city of Alexandria; and Galen (AD 129-200), the pioneering surgeon, anatomist, and experimentalist. Homer copiously sang the praise of Egyptian medicine in the Odyssey (around 800 BC). Egyptian medicine also had considerable influence on Hebrew and Roman medicine. However, after the destruction of pagan temples by Emperor Theodosius I in 391 CE and the burning of the library in Alexandria, ancient Egypt faded into oblivion (Halioua and Ziskind, 2005).

Medicine in ancient Egypt was trying to restrain all malefic beings from action and preserve the individual's well-being. Thus, the initial statement that magic and science were one and only, a sole concept, represented by *Heka Veiga (2014)*. There was a rekindling of interest in ancient Egyptian medicine after the discovery, in the 1860s, of medical papyri such as the Edwin Smith Papyrus (arguably authored by Imhotep himself) and the Ebers Papyrus, which probably originated during the First Dynasty around 3000 BC (*Halioua and Ziskind, 2005*). As sources of information for the study of magical medical practices in ancient Egyptic, demotic, hieratic, Coptic, including Greek), ostraca, general literature (personal letters), and all has medical or magical content.

Papyrus Edwin Smith mentioned diseases and surgery cases, 62 in total, fourteen with known treatments, and 48 without mentioning any treatment, may be chronic diseases difficult to treat or even unknown diseases. It has seventeen pages, and it was found in the tomb of a doctor (*David*, & *Rosalie*, 2008; Sanchez et al., 2007). It deals with examining the patient by the doctor; most of the examples given are of trauma cases. The word brain is used for the first time to mention the organ in question: "Smashing his skull and rending open the brain of his skull, it means the smash is large, opening to the interior of his skull, to the membrane enveloping his brain, so that it breaks open his fluid in the interior of his head" (*Feldman et al., 1999*).

At the same time as Papyrus Edwin Smith, another Papyrus was bought in 1872 by Egyptologist George Ebers, who gave it his name. It contains 877 medical treatises covering physical, mental, and spiritual diseases. The Ebers Papyrus has references to eye diseases, gastrointestinal, head, and skin. This Papyrus has 110 pages and dates to 1534 BC, the reign of Amenhotep I. It contains spells, a section on gastric diseases, intestinal parasites, skin, anus diseases, a small treatise on the heart, and some prescriptions thought to have been used by gods. It continues with migraine treatments, urinary tract disturbances, coughs, hair conditions, burns and different wounds, extremities (fingers and toes), tongue, teeth, ears, nose and throat, gynecological conditions, and the last section on what is thought to be tumors. Still unidentified diseases; *aaa*, probably *ancylostomiasis* (hookworm endemic to ancient Egypt) (Davis, 2000; Kloos et al., 2002).

Papyrus Hearst Housed at the Bancroft Library, University of California, was discovered at Deir el-Ballas in Upper Egypt. It has eighteen pages, concentrating on the urinary tract treatments, blood, hair and snake, and scorpion bites. It was written in hieratic; its prescriptions go from a tooth that has fallen out to medicine to treat the lung and even human bites, pigs, and hippopotamus bites. This Papyrus was in very good condition. It also has a chapter on orthopedics.

London Papyrus has some magical formulae, with spiritual and magical texts (demon castaway spells) (Borghouts, 1978), spells against swellings, some unidentified diseases, one for the placenta, dermatological diseases, eye diseases, treatment of hemorrhages (in pregnant women) and burns. It has some 62 prescriptions, from which only 25 are medical (Leitz and Christian, 1999). There is, in this Papyrus, evidence of interchanging with foreign cultures, especially the mention of new vegetable and mineral ingredients used more and more in New Kingdom Egypt (Ritner & Robert 2000).

Ancient Egyptian texts do not mention descriptions of instruments. Some items have survived art depictions, and some medical papyri refer to which 'knife was used for a specific prescription. Knives used in medical acts had stone blades and sharpened edges that were even more sharpened than today's surgical steel. Later on, doctors used bronze blades and later iron blades as well. The cauterizing act accompanied the procedure. The blade was heated until it became incandescent, and then it was used to make incisions, cutting and sealing the blood channels limiting the bleeding. They used special-shaped instruments of different sizes (*Győry & Hedvig, 2006*).

At the Museum of History of Medicine in Paris, some medical instruments from ancient Egypt were brought by

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Clot Bei. In the temple dedicated to Haroeris at Kom Ombo, there is an evidence of what seems to be a collection of 37 medical instruments: bone saws, suction glasses, knives, scalpels, retractors, scales, lancets, and dental tools. Some of the instruments are difficult to identify as to what function they were designed for. Some of those can be ritual instruments.

Halioua Bruno and Bernard Ziskind (Translated from French by M. B. Devoise) said that {In 2005, during one rather rushed tour of Egypt, the guide drew my attention to a frieze on the wall of Kom Ombo temple near Aswan. Knowing his medical background, he painstakingly pointed out the close resemblance between modern surgical instruments and many of the medical implements that pharaoh Imhotep (Third dynasty and the acknowledged founder of Egyptian medicine) was depicted to be receiving. One item could not but be obstetrical forceps. I was impressed but did not fully realize how advanced Egyptian medical practices of surgery and orthopedics (particularly bone-setting) were. These practices were assembled and codified (probably by Imhotep) some 2,500 years before Hippocrates, the Greek physician known as the father of modern medicine} (Halioua and Ziskind, 2005).

Ancillary staff appears to have been limited to massage therapy and nurses for wet-nursing or child care. Although midwives must have existed, there is no Egyptian word for the midwife and no medical papyri for childbirth. We have some titles for several specialty practices in ancient Egypt, such as dentists and ophthalmologists, but none is for gynecology or obstetrics. Women, perhaps specialized midwives probably conducted medical care of women. The papyri do list many tests for fertility, pregnancy, and the sex determination of the unborn child. An example is moistening the seeds of barley and emmer with a woman's urine. Growth of all would indicate pregnancy, growth of barley would indicate a male, growth of emmer a female, and no growth would indicate that there was no pregnancy. Modern tests have shown that this test was not valid (Davis, 2000; Zimmerman, 2017). The phrase usually introduced the remedies, "You shall prepare (ir) for him, " followed by instructions for grinding, mashing, straining, or cooking. Active principles were extracted by solution in water, alcohol, or oil and administered in water, honey, milk, oil, wine, or beer, measured by volume rather than weight. The smallest volume was a ro, about 14 ml, or a mouthful (Nunn, 2000).

The most common route of administration was oral. Drugs were also given by enema or suppository into the rectum. Gynecologic papyri indicates many remedies and suppositories in the vagina, and many medications were applied directly to the skin. Fumigation, inhalation, or sitting on burning medicine was also used.

Egyptian medicine appears to have been static for over 2,000 years, from the Old Kingdom until Greek medicine. In 331 BCE, the new city of Alexandria became the major cultural and scientific center of the Greek world, including a medical school. Greek medicine essentially supplanted ancient Egypt when the Greek physician Herophilus moved to Alexandria in the third century BCE and began the modern studies of anatomy and physiology. Although the Romans ruled Egypt after 31 BCE, Greek language and medicine remained dominant. Coptic Christianity was established early in Egypt, and medicine remained predominantly Greek until the Arab conquest of 641 CE. The language of ancient Egyptian and its medicine was lost until the nineteenth-century decipherment of hieroglyphics by Champollion. Our understanding of ancient Egyptian medicine remains an ongoing process.

There is no evidence for the medical training of midwives. In the Old Kingdom, the word for 'midwife' is associated with the word for 'nurse,' who assisted a doctor, but this association ends after that period. Midwives could be female relatives, friends, or neighbors and do not seem to have been regarded as medical professionals.

The nurse could be female or male and was a highly respected medical professional, although, as with midwives, there is no evidence of a school or professional training. The essential kind of nurse was the wet nurse. Graves-Brown notes, "with the probable likelihood of high mortality of mothers, wet nurses would have been particularly important." Women regularly died in childbirth, and legal documents show agreements between wet nurses and families to care for the newborn in the event of the mother's death. The dry nurse, who would assist in procedures, was accorded such respect that he or she was represented during the time of the New Kingdom as linked with the divine. The association of the nurse with the doctor seems well established but not so much their link with the dentist.

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