

Review Article

Medicine in Ancient Egypt: A Comprehensive Study

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Abstract

<p>Keyword:</p> <p>Herbal, Papyri, Pharaonic</p> <p>Corresponding author:</p> <p>Dr. Raouf Roshdy ART Consultant Obs&Gyn Consultant Family Medicine Diploma.</p> <p>Phone: + 20 1003100667</p> <p>Mail: raouf66@hotmail.com</p>	<p>The ancient Egyptian civilization, which flourished for over three millennia along the banks of the Nile River, is renowned for its remarkable advancements across a multitude of fields, including architecture, mathematics, and notably, medicine. This study aims to provide an in-depth exploration of the historical and cultural context surrounding medical practices in ancient Egypt, examining how these practices evolved over time and their profound impact on both contemporary medicine and the broader field of healthcare. The research begins by contextualizing ancient Egyptian medicine within the framework of its rich cultural and religious beliefs. This paper investigates how deities, such as Imhotep, the god of medicine, and Sekhmet, the goddess of healing, influenced medical practices and the perception of health and illness in ancient Egyptian society. Through a meticulous analysis of medical papyri, including the Ebers Papyrus and the Edwin Smith Papyrus, this study highlights the sophisticated medical knowledge possessed by ancient Egyptian physicians. The findings indicate that ancient Egyptians employed a combination of empirical observation and spiritual healing, utilizing herbal remedies, surgical interventions, and rituals to address both physical and psychological conditions. The influence of ancient Egyptian medicine on modern practices is also a focal point of this study. By tracing the transmission of medical knowledge through various cultures, including Greek and Roman civilizations, this research underscores the enduring legacy of ancient Egyptian medical practices in shaping contemporary healthcare systems. Summary, this study not only highlights the sophisticated medical system of ancient Egypt but also emphasizes its lasting impact on the development of medical knowledge and practices throughout history. By bridging the past with the present.</p>
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1. Introduction

The ancient Egyptian civilization, flourishing for over three millennia along the Nile River, is celebrated for its significant contributions to various fields, including architecture, mathematics, and medicine. Ancient Egyptian medicine, as evidenced by surviving papyri such as the Ebers and Edwin Smith Papyri, encompassed a wide range of knowledge, including anatomy, surgery, pharmacology, and preventive medicine (refs to papyri). This study provides an in-depth exploration of the historical and cultural context of ancient Egyptian medical practices, examining their evolution and their profound impact on subsequent medical traditions. Beyond general healthcare, the study delves into specific areas of expertise, such as sophisticated childbirth practices evidenced by temple murals, early attempts at prosthetic medicine (PowerPoint), and even innovative diagnostic techniques like urine-based pregnancy tests (PowerPoint), demonstrating a complex and nuanced understanding of the human body and its ailments. By analyzing these practices, this research aims to illuminate the sophistication of ancient Egyptian medicine and its lasting legacy.

Historical and Cultural Context

2.1. Periods of Ancient Egyptian History

Ancient Egyptian history is divided into several periods, each contributing to the development of medical practices:

- Old Kingdom (2686–2181 BCE): The foundation of medical knowledge, with early surgical practices and the use of herbal remedies.
- Middle Kingdom (2040–1650 BCE): Advancements in medical documentation and the establishment of medical institutions.
- New Kingdom (1550–1069 BCE): The peak of medical knowledge, with detailed surgical techniques and the use of medical papyri.

2.2. Religious and Cultural Influences

Religious and cultural beliefs had a profound influence on medical practices in ancient Egypt. Medicine was closely associated with religious rituals. For example, the god Anubis was associated with mummification and death, while Isis was considered the goddess of medicine and healing. Priests often

acted as intermediaries between humans and gods in healing processes. Surgical practices and embalming were also linked to beliefs about the afterlife, with medicine playing a key role in preparing corpses for this transition.

2.3. Social and Political Influences

The social and political structure of ancient Egypt significantly impacted medical practices. Egyptian society had a hierarchical system, with the Pharaoh at the top, followed by the ruling class and nobility, and then the lower classes of farmers and craftsmen. Medical care and attention were primarily focused on the upper classes, particularly the Pharaoh and his family, while the lower classes had limited access to medical treatment.

3. Medical Practices

Ancient Egyptian medical practices were remarkably diverse and sophisticated for their time, encompassing a wide range of specialties and techniques rooted in both empirical observation and religious beliefs.

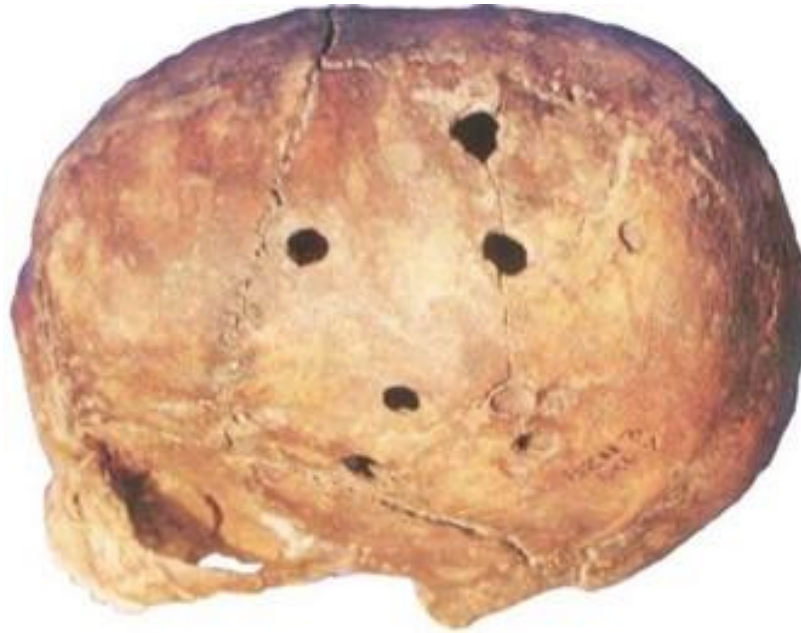
3.1. Childbirth

Childbirth was a significant aspect of ancient Egyptian life, and their understanding of maternal care appears advanced for the era. The birth mural at the Kom Ombo temple provides compelling evidence of this, depicting a woman in a vertical delivery position, likely supported by a birthing chair. This suggests a practical understanding of how gravity could facilitate the birthing process. The detailed depiction in the mural underscores the importance placed on safe delivery and maternal well-being.



3.2. Surgery

Surgical practices in ancient Egypt demonstrate a notable level of skill and anatomical knowledge. While the full extent of their surgical capabilities is still being understood, evidence suggests attempts at complex procedures, including brain surgery. The discovery related to Usermontu, involving an iron screw in the skull, hints at their efforts to treat traumatic injuries. These findings, though limited, point to a willingness to intervene surgically when necessary.



3.3. Dentistry

The practice of dentistry existed in ancient Egypt, likely addressing common issues such as tooth decay and pain. While perhaps not as sophisticated as modern dentistry, the presence of dental procedures indicates an awareness of oral health and attempts to manage dental problems.



3.4. Prosthetic Medicine

The discovery of early prosthetic devices, such as artificial toes, highlights the ingenuity of ancient Egyptians in addressing physical disabilities. These prosthetics, though perhaps rudimentary by today's standards, suggest an early understanding of the importance of mobility and quality of life for individuals with limb differences.



3.5. The Urine-Based Pregnancy Test

Ancient Egyptian medical knowledge also included diagnostic techniques. A papyrus dating back to around 1350 BCE describes a urine-based pregnancy test. This test involved a woman urinating on wheat and barley seeds over several days. If the barley grew, it was believed to indicate a male child; if the wheat grew, a female child; and if neither grew, the woman was not pregnant. Interestingly, a 1963 study testing this theory found that the urine of pregnant women did, in 70% of cases, promote growth in the seeds, unlike the urine of non-pregnant individuals. Scholars speculate that elevated estrogen levels in pregnant women's urine may have been the reason for this result, potentially making this one of the earliest known biochemical pregnancy tests.

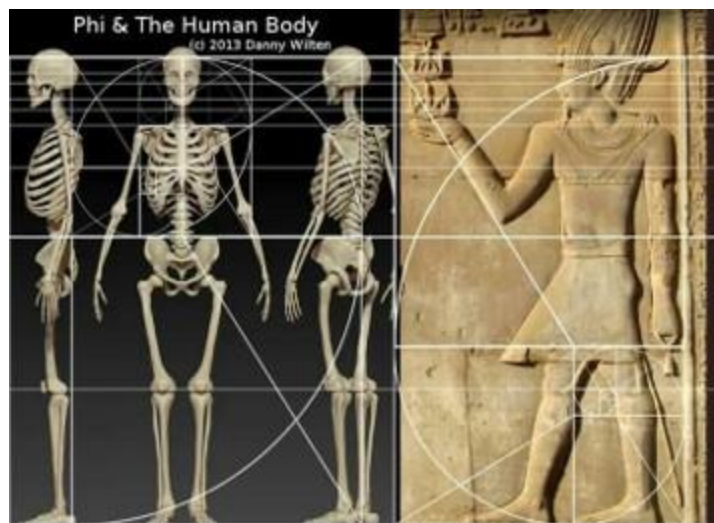
3.6. Herbal Remedies and Anatomy

In addition to these practices, ancient Egyptians utilized a wide array of herbal remedies for various ailments. Their medical papyri also demonstrate a basic understanding of human anatomy, which likely informed their surgical and pharmaceutical practices. The structured training of medical professionals further contributed to the development and transmission of this medical knowledge.

4. Medical Knowledge

4.1. Anatomical and Physiological Knowledge

The ancient Egyptians had a relatively advanced understanding of human anatomy, documented in medical papyri such as the Ebers Papyrus and the Edwin Smith Papyrus. These texts contain detailed descriptions of internal organs, their functions, and surgical techniques.



4.2. Medical Papyri

Several medical papyri have been discovered, providing insights into ancient Egyptian medicine:

- Ebers Papyrus (1550 BCE): Contains over 700 prescriptions and treatments for various ailments, including herbal remedies and surgical procedures.
- Edwin Smith Papyrus (1600 BCE): Focuses on surgical medicine, detailing treatments for fractures, head injuries, and other conditions.
- Kahun Papyrus (1800 BCE): Specializes in gynecology and obstetrics, with treatments for infertility and pregnancy.

4.3. Surgical Practices

NAME	TIME	PLACE WHERE KEPT
BERLIN PAPYRUS	21 ST OR LATER CENTURY BC	BERLIN, GERMANY
HEARST PAPYRUS	20 TH OR LATER CENTURY BC	UNIV. OF CALIFORNIA, USA
KAHUN PAPYRUS	19 TH CENTURY BC	UNIV. COLLEGE, LONDON
RAMESSEUM MEDICAL PAPYRUS	18 TH CENTURY BC	
EDWIN-SMITH PAPYRUS	16 TH OR EARLIER CENTURY BC	NEWYORK ACADEMY OF MEDICINE, USA
EBER'S PAPYRUS	16 TH CENTURY BC (1550 BC)	UNIV. OF LEIPZIG, GERMANY
CHESTER BEATTY MEDICAL PAPYRUS	12 TH CENTURY BC	BRITISH MEUSEUM, LONDON
BROOKLYN PAPYRUS	4 TH OR LATER CENTURY BC	BROOKLYN MEUSEUM, USA
CARLSBERG PAPYRI	2 ND AND LATER CENTURY BC	UNIV. OF COPENHAGEN, DENMARK

Ancient Egyptian surgeons performed complex procedures, including:

- Head Surgery: Removal of parts of the skull to treat head injuries.
- Eye Surgery: Cataract removal and treatment of glaucoma.
- Cosmetic Surgery: Removal of skin tumors and correction of deformities.



5. Notable Medical Achievements

5.1. Mummification

The process of mummification required detailed knowledge of anatomy and preservation techniques. It also contributed to the understanding of the human body and its organs.

5.2. Herbal Medicine

The ancient Egyptians used a wide range of medicinal plants, such as:

- Papyrus: Used as a pain reliever and for treating skin infections.
- Flax: Used as an antiseptic and for treating urinary tract infections.
- Black Seed: Used as an anti-inflammatory and for treating asthma.

5.3. Dental Medicine

Evidence from mummies and medical texts suggests that the ancient Egyptians practiced basic dental care, including the treatment of dental abscesses and the use of herbal remedies for toothaches.

6. Influence on Modern Medicine

6.1. Transmission of Knowledge

Ancient Egyptian medical knowledge influenced later civilizations, including the Greeks and Romans. The Edwin Smith Papyrus, for example, is considered one of the earliest scientific medical texts and laid the foundation for modern surgical practices.

6.2. Legacy of Imhotep

Imhotep, a prominent figure in ancient Egyptian medicine, was later deified as a god of healing. His contributions to medicine and architecture influenced both Egyptian and Greek medical practices.

7. Conclusion

Ancient Egyptian medicine was a sophisticated system that integrated science, religion, and culture. The Egyptians made significant advancements in anatomy, surgery, pharmacology, and preventive medicine, many of which influenced later civilizations. By studying ancient Egyptian medical practices, we gain valuable insights into the origins of modern medicine.

References

1. *Ebers Papyrus: University of Leipzig Library.* [Link to Ebers Papyrus] (<https://www.ub.uni-leipzig.de>)
2. *Edwin Smith Papyrus: New York Academy of Medicine.* [Link to Edwin Smith Papyrus] (<https://www.nyam.org>)
3. *Kahun Papyrus: Petrie Museum of Egyptian Archaeology, London.* [Link to Kahun Papyrus] (<https://www.ucl.ac.uk/culture/petrie-museum>)
4. *Imhotep: Encyclopedia Britannica.* [Link to Imhotep] (<https://www.britannica.com/biography/Imhotep>)
5. *Ancient Egyptian Medicine: World History Encyclopedia.* [Link to Ancient Egyptian Medicine] (https://www.worldhistory.org/Egyptian_Medicine/)

External Links for Further Reading



- PubMed: [Ancient Egyptian Medicine] (<https://pubmed.ncbi.nlm.nih.gov>)
- British Museum: [Egyptian Medical Tools] (<https://www.britishmuseum.org>)
- National Geographic: [Ancient Egyptian Surgery]
(<https://www.nationalgeographic.com>)