ANCIENT EGYPTIAN ROOTS IN THE MODERN MEDICAL AND PHARMACEUTICAL CIVILISATION

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ABSTRACT

The Egyptian civilisation was long before any of the neighbouring countries. Medicine and Pharmacy in ancient Egypt were deeply rooted since millennia of years. The ancient Egyptian medical papyri, discovered more than a century age, proved that the Egyptians were the first to attain civilisation, which was copied and adopted by all the neighbouring countries and not the reverse as believed by the Europeans that the ancient Greece was the cradle of civilisation.

In past geological periods more than a million years ago, the river Nile began passing through the Egyptian desert, leaving annually large amounts of mud, which attracted the inhabitants to leave the nomad life and settle down along its banks. Round the year 40000 B.C., they cultivated this fertile land, and hence they constituted the first civilised community on earth.

By the time, ancient Egyptian cities were gradually, appearing round the year 10000 B.C, such as Fayyoum, Meremdhah, Bani Salama, Maadi, Helwan............etc., two powerful kingdoms were finally proclaimed around 4500 B.C., one in Upper Egypt and the second in Lower Egypt and became united but not for long, because in one hundred years time, brokeout and then for another one thousand years they remained separated, till 3200 B.C, finally became united, and steps towards civilisation were speedingly achieved. This civilisation was long before any of the neighbouring countries such as Mesopotamia began their unification and progress.

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Medicine and Pharmacy in ancient Egypt were deeply rooted since mellenia of years, even before any unification of the two kingdoms were thought of. The history of pharmacy is in the same time the history of drugs, pharmaceuticals and ways of their preparation and uses and extraction from plants, animals or minerals in order to help in the treatment of the sick people.

Pharmacy became a highly specialised art by time and its practitioners often called 'Herbalists' who were in the habit of prescribing these herbal medicines to their patients.

Medical therapy became by time separated into pharmacists and physicians, which attracted due to the renowned reputation of their skill, the attention of all the neighbouring countries such as Greece and Assyria...etc, not forgetting Persia and India. They sent envoys to Egypt so as to learn all what is permissible of these holy secrets of medicine and pharmacy, and then by turn, help to teach these sciences in their homelands.

The ancient Egyptian herbalists, or pharmacists of to-day, became very excelled in the preparation of aromatic ointments and perfumes.

Many temple academy systems were established in ancient Egypt thousands of years B.C, scattered in the major capitals of the provinces, the oldest and most famous was that at the city of Anu (Oun to the Hebrews, Heliopolis to the Greek, Matareyyah to the modern Egyptians which is a suberb north of Cairo today), built around 5000 B.C. and comprised many schools for every branch of science, philosophy, art...etc.

These educational complexes had large plantations, parts of them were dedicated for the cultivation of all sorts of medicinal plants, either locally or imported. These herbal gardens were under strict supervision of qualified pharmacists in all steps of cultivation, gathering, storage, preparation of medicinal preparations ready to be dispensed in special pharmacies belonging to the school of medicine. Other famous complexes were erected in Memphis, Sais, Abydos, Edfu...etc.

Ancient Egypt was famous for the production of very precious and expensive perfumes highly esteemed by the surrounding countries and succeeded in imitating its formulae. Same goes for the production of incense.

The ancient Egyptians medical papyri, discovered more than a century ago, proved that the Egyptians were the first to attain civilisation which was copied and
adopted by all the neighbouring countries and not the reverse as believed by the Europeans that ancient Greece was the cradle of civilisation. Many of the works of Hippocrates, Thales, Aristotle were mentioning in exactly the same words many of the sciences of ancient Egypt. This is based on the fact that most of these medical papyri mentions prescriptions and notions that they were known even before the time of the dynastic era i.e. before the year 3200 B.C.

The ancient Greeks established in their country, many academies on the same basis as that of the ancient Egyptian temple-academy complexes, copying all the Egyptian sciences and teaching them, mixed with the philosophical view of the Greeks and in the Greek language.

When Alexander the Macedonian, invaded Egypt in 332 B.C. he was startled by the presence of a huge civilisation attained in all fields. He ordered the establishment of a new university in Alexandria, on the Greek style in science and philosophy so as to hellenise Egypt. This new university was the Greek copy of the Egyptian temple complexes, exported back to Egypt. The Ptolemeiac kings forced the Egyptian philosophers and scientists to leave their posts and teach in this new university in the Greek language, together with some Greek colleagues. Many Greek students from abroad came to study in this University, among them were the famous Hippocrates, Pythagoras, Aetius, Theophrastus, Galen...etc, who by turn, taught these sciences to their students back home, so helped in the spread of the Egyptian civilisation everywhere.

This Alexandria University was still active up till 720 A.D. i.e. after the Islamic invasion of Egypt. The Arabs, after taking hold of all the eastern part of the Roman and Persian empires, went westward till the Atlantic ocean and Spain, spreading the new religion and philosophy ahead.

The Arabs transferred most of the Alexandrian Scientists to Damascus, the capital of the Omayads, and so helped in the translation of all the Greek and Egyptian sciences into Arabic, on which they built up civilisation.

The ancient Egyptians were very fond of cosmetics from the dawn of history. They used various kinds of plant extracts, aromatic oils, minerals salts, animal products...etc. They used to rub the aromatic oils and ointments on their bodies, dye their hair with henna either alone or mixed with indigo (for black dye) or chamomile or saffron for varied colours. They prepared lotions for hair fall, anti-dandruffs, wrinkles of the face, cheek and lips, powders,
creams, eye-liners either green or black. The ancient Greeks adopted all of these cosmetic preparations and applied to their bodies.

Also perfumes were mastered by the ancient Egyptians and got a high reputation everywhere, using different aromatic oils with herbs such as myrrh, henna, cinnamon, etc. and also animal products such as honey and musk together with castoreum. Incense was also very common and important in every day use and also in the ceremonial festivities in the temples such as the famous Kyphi incense.

Mummification in ancient Egypt became an essential practice, governed by the religion which necessitated the need for the preservation of the dead body so as the soul can once more enter it in eternity. The pre-dynastic way of preservation was to bury the body in the dry sand of the desert, then during the old kingdom, they used to cover the body with about twenty layers of linen with natron salt in between to absorb the water, then put in a wooden coffin then buried. Later on, the dead bodies were immersed in natron salt for 70 days after evacuating the viscera. With the spread of Christianity in Egypt, mummification lost its importance and the dead bodies were only wrapped in linen and splashed with perfumes.

The Greeks also adopted the ancient Egyptian way of mummification and remained practised until the pre-renaissance period where the broken pieces of the bituminous embalmed bodies were used in medical prescriptions. Mummification practices paved the way to the progress of many sciences such as anatomy, medicine, pharmacy, chemistry, etc.
## REFERENCES

1. **BELL, H.I.**  
   1930 Egypt and the Byzantine Empire  
   London.

2. **BOURGEY, L.**  
   1953 Observation et Experience Chez les  
   Medicine de la 'Collection Hippocra- 
   tique' Paris.

3. **BREASTED, James H.**  
   1922 Ancient Records of Egypt, New York.

4. **Breasted, James H.**  
   1905 History of Egypt, Chicago.

5. **Breasted, James H.**  
   1912 The Development of Religion and  
   Thought in Ancient Egypt, Chicago.

6. **Butler, A.J.**  
   1927 The Arab conquest of Egypt. London.

7. **Cread, J.M. & DeLacy O' Leary.**  
   1940 The Contribution to Christianity.  
   Paris.

8. **Daremberg, Ch.**  
   1854 Oeuvres Anatomiques, Physiologiques  

9. **Dawson, Warren, R.**  
   1940 Magician & Leech, New York.

10. **Dawson, Warren, R**  
    1925 Studies in Ancient Materia Medica.  
    New York.

11. **Dawson, Warren, R.**  
    1944 The Legacy of Egypt, New York.

12. **Davis, E.**  
    1949 The Tomb of Nakht, London.

13. **Diehl, Ch,**  
    1933 L' Egypte Chretienne et Byzantine,  
    Paris.

14. **Erman, Adolf**  
    1971 Life in Ancient Egypt, New York.

15. **Erman, Adolf**  
    1968 The Literature of the Ancient Egyptians.  
    New York.
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<th>No.</th>
<th>Author</th>
<th>Year</th>
<th>Title and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Lane-Poole, Stanely</td>
<td>1901</td>
<td>A History of Egypt in the Middle Ages, London.</td>
</tr>
<tr>
<td>30.</td>
<td>Murray, Margaret</td>
<td>1964</td>
<td>The Splendour that was Egypt, London.</td>
</tr>
</tbody>
</table>
34. Shorter, A.W. 1925 Every Day Life in Ancient Egypt, London.
35. Sigerist 1930 History of Medicine, Prim & Archaic, London.
36. Singer, C. 1922 Greek Biology and Greek Medicine, Oxford.
37. Singer, Charles 1962 Short History of Medicine, London.
38. Taylor Henry Osborn 1922 Greek Biology and Medicine, New York
साशंक

आधुनिक चिकित्सा तथा मैदानी सभ्यता के मूल ने प्राचीन मिल

—समीर यादव अल गम्माल

मिल की सम्भवता उसके पहोची देशों की सभ्यताओं की अपेक्षा बहुत पहले ने ही विश्वास था। यूरोपिय लोगों के विचार में प्राचीन यूनानी सभ्यता का छोइ-नामस्वल था। किंतु इसके विपरीत एक सदी पूर्व खोजो गई एक चिकित्सायुक्त प्राचीन मिल के मेदिये से यह सिद्ध होता है कि वास्तव में मिलों लोग सभ्यता प्राप्ति में सर्व-प्रथम और पहोची देशों ने उनका अवलोकन किया।