We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,300

Open access books available

172,000

International authors and editors

190M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities

WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com

The Gynaecological Papyrus Kahun

Helena Trindade Lopes and Ronaldo G. Gurgel Pereira

Abstract

The Papyrus Kahun is oldest known Egyptian medical document addressing issues of midwifery, dating back to the second Millennium BC. Here it follows a study of the papyrus, featuring hieroglyphic text and its transliteration and translation versions. This work also features commentaries regarding the papyrus' medical substances and some linguistic evidences on the intimacy between spiritual and physical spheres in the Egyptian therapeutics. After the papyrus text, there is an Egyptian-English glossary.

Keywords: History of Medicine, Papyrology, Kahun, Ancient Egypt, Gynaecology

1. Introduction

The Gynaecological Papyrus Kahun¹, the oldest known medical papyrus, was discovered by W. M. Flinders Petrie in 1889, in a place near the modern city of Lahun, in Fayum [1]². The papyrus was in a very bad state of preservation, therefore it had to be carefully restored, in 1890, by Francis Griffith so he could, finally, be able to make the first hieroglyphic transcription of the hieratic text and its publication³ still in 1898 [2]. Nowadays it is conserved in the Petrie Museum of Egyptian Archaeology, University College London (UC 32057), in London, United Kingdom.

The papyrus Kahun, dated from the kingdom of Amenemhat III, circa 1825 BCE⁴ (Middle Kingdom, dynasty XII), is one of the biggest papyri of that period, with about 1 m long for 32 cm high, and features the oldest known treaty of gynaecology and obstetrics, which addresses issues such as fertility, pregnancy, contraception, and gynaecological diseases.

¹ The term Kahun was the name given by Petrie to the site of the city of Lahun, which, under the reign of Amenemhat III and his successors, would have been a very prosperous city.

² Nunn, 1996, p. 34.

³ **The texts were published in facsimile, with hieroglyphic transcription and translation into English by Griffith.** Cf. Griffith, F. Ll. (1898). *The Petrie Papyri: Hieratic Papyri from Kahun and Gurob*. London: Bernard Quaritch, p. 5-11 and pl. V-VI.

⁴ A note on the reverse of the gynaecological papyrus is dated to the year 29 of Amenemhat III, *Ibidem*.

The work comprises three pages, is divided into 34 horizontal columns, oriented from the right to the left, that have a common format: begin with a brief report of the symptoms; then, the doctor is advised on how to approach the patient to present his diagnosis and, finally, treatment is suggested. However, no mention is made of the likely prognosis. This process of symptoms, diagnosis, report and treatment described makes up the various sections. Naturally, as in other medical works, Papyrus Kahun refers to an enchantment⁵.

The suggested treatments are diverse and include fumigations, massages, and medications introduced into the body as pessaries or as a liquid to be drunk or rubbed on the skin. Donkey milk and perfumed oils are part of the medical material to be used in these procedures.

The text does not refer to any proposed surgery. The final paragraphs of the text are dedicated to pregnancy, presenting teachings related to conception which include the use of incense, fresh oil, dates, and beer, to contraception, suggesting the use of crocodile manure and also honey and natron and, again, gynaecological treatments.

After the publication of the Papyrus Kahun by Griffith [2] at the end of the XIX century, only in the second half of the XX century, the text is again the subject of study and publication within the scope of the most important investigation of medical papyri coordinated by H. Grapow [4], between 1954 and 1973. A hieroglyphic transcription of the papyrus Kahun is done in volume V and the translation and commentary of the text is presented in Volume IV.

In 1975, J. Stevens [5], presented an English translation of the text, and in 1995, Th. Bardinet, also presented his translation of the papyrus [6] and some comments on the text.

In 2002 Stephen Quirke published his transliteration and translation of the text online [7] and shared that translation again in the work he produces with M. Collier [8] in 2004.

Finally, in 2017, Didier Fournier introduced us to [9], where he performs the hieroglyphic transcription, transliteration, and translation of the papyrus as well as medical comments and lexical, syntactic and semantic considerations to the text. The work also reproduces the text in hieratic from facsimiles proposed by Griffith in 1898.

In addition to the publication and translation of the papyrus, the studies dedicated to the gynecological treatise presented in Papyrus Kahun are also very small. In 1952, C. D. Leake makes the first references in [10]. In 1992, C. Reeves in a small essay [11] also dedicates two pages to it. Four years later, J. F. Nunn in [1] introduces the papyrus and makes some comments on the text. Finally, in 2011, Lesley Smith published the latest article on the gynaecological papyrus Kahun [12]. Other references, in general works, although very reduced, happen in Strouhal, E., Vachala; B., Vymazalová [13], dated from 2014.

⁵ In paragraph 30. The works on medicine in Ancient Egypt refer to the belief in a holistic dimension of life, in which the disease is understood, naturally, as a disturbance of an inner order that is reflected, a posteriori, physically [3]. Hence, the use of magical practices that could help harmonizes the patient.

There are multiple semantic definitions and explanations for cure. Some of them are also based on mythical systems. In fact, this work assumes that cure is a double-folded concept. On one hand, the semantic meaning of cure manages to assert a cultural identity and a gender delimitation: Healthy vs. Diseased; Favoured by the gods vs. Abandoned by the gods, etc.

This approach of the Papyrus focuses on the so-called supernatural elements that, by any means are being mentioned in the therapeutics. We understand the separation between magic and medicine was unknown in Ancient Egypt, as they are the product of modern Egyptology problematization. The Egyptian medicine coordinates natural and supernatural elements in their therapeutics. Thus, we shall investigate the ontological specificities of the ancient Egyptian cure process. From the diagnosis to the therapeutics.

2. Commentaries

2.1 On the papyrus

The papyrus was composed in Hieratic, using a simple and direct language. It was probably compiled from some personal notes or a *vade mecum*.

There are 34 cases, along 3 columns of horizontal text, written from right to the left. Its first column (**Figure 1**) has 33.5 cm of height and starts the gynaecological tractate. This section has 29 short lines of text in good conditions.

The second column (**Figures 1 and 2**) has 38.5 cm of height and presents heavy damage on the central area of the page, between lines 26 and 59. So, only 7 lines out of its original 30 are complete. The second column also presents longer lines of text than the first one.

The third column (**Figure 2**) measures 33 cm of height and is also heavily damaged. Its 28 lines of text are the longest of the tractate. However, only one line is complete, from the beginning to the end. This column is divided into fragments A and B. Fragment B is just a small scrap with 4 incomplete illegible lines. Therefore, this work will deal with column 3 - fragment B only.

Another point of interest concerning column 3 is the transition to a totally different style of heading and organization of the treatments. That suggests column 1 and 2 have the same origin, while column 3 was copied from a different source.

For didactical matters, we decided to revert the text direction when we established the hieroglyphic matrix of this version. We also decided to present the

Figure 1.
Plate VI.1 (columns 1–2).

Figure 2.
Plate VI.2: (columns 2–3).

source in a format case-by-case for reasons of practicality. The present version of the text was originally built in Portuguese [14], and then, translated into English.

2.2 On the therapeutics

The 34 cases described in the papyrus are normally divided into mini-sections with the support of red ink. First, the disease is described. After making the diagnosis directly to the patient, a treatment is given.

The treatment presents the ingredients and, occasionally, the precise dosage of each element. Interestingly, this papyrus gives preference to generic measures, such as “spoon” or “jar”. Then, the method of preparing the ingredients is concluded by the way the medicine must be applied to the patient.

Medicines are always taken orally, inserted into the vagina, or applied on the skin using massages or bandages. Fumigation seems to be the most common therapy, always incorporating various ointments with incense. There is great concern about therapy with the patient’s uterus. Virtually all the diseases described are somehow linked to an origin in the uterus, and it is through the uterus that they seek to treat them [15].

The translation of this document took care to compare hieroglyphic versions established by British authors with Griffith’s (1898) slides of hieratic text. It is interesting to note that all the translations previously cited reproduce the text in hieratic from facsimiles proposed by Griffith.

Hence, we found that the present version promoted “corrections” in the vocabulary proposed by previous works. The reader will find two diagnoses of incurable diseases (cases V and XIII), that are normally left aside by English translations. There is a short discussion on the spiritual dimension on Egyptian medicine (2.4). Further contributions are the identification of ingredients in the *materia prima* section (2.5), and of the procedure of verifying the patient’s arterial pulse mnj3 (cases XXIX and XXXII).

2.3 P.Kahun as an educational text

From its 34 cases, there are 18 occurrences (1–17 & 25) where the papyrus actually can be used as a didactic textbook. In those texts, there is an approach aiming to guide the reader across each step of the therapeutic process. Such texts adopt the sequential sdm.hr = f (“then, he should listen”) providing the reader with the “what follow next” for each section. It is possible to summarize this pattern as the following:

- A heading to identify each new case (e.g. “A treatment for a woman who suffers A, B, C, etc.”). A diagnostic is proposed to the reader. Then, the text concludes the first section with the recommendation: “then you should say to her” and announce the treatment.
- The diagnosis is described via a nominal identification sentence: “Disease-D” pw (this is a disease-D);
- Finally, the papyrus proceeds with the next step with the sayings: “then you must prepare for her” (here translated as “(then,) you should treat her), followed by the prescription of ingredients for each case and the right way of its application.

The didactic structure of this papyrus fits with the features of typology 4a, as proposed by [15], from which the table below is based on (Table 1).

I.	Heading	šs3w s.t hr mn A, B, C etc.	“Treatment/Experiences on a woman who suffers from A, B, C, etc.”
II.	Investigation	not present in typology 4a	
III.	Outcome		
a	introduction	gd.hr = k r = s	“Then/consequently, you should say to her (on this regard)”:
b = d	diagnosis = <i>causa</i>	“D” pw	“This is a D-disease!”
c	reasoning	not present in typology 4a	
IV.	Treatment	jrj.hr = k r = s	“Then/consequently, you should do for her (or even: ‘then, you should do against it’)”.

Adaptation from Pommerening, 2014, p. 32.

Table 1.
Text structure of typology 4a.

It is possible to divide the medical *materia prima* in two greater groups, by distinguishing ingredients of anthropic nature (it needs to be manipulated and transformed by man) *versus* ingredients that can be found in its natural milieu [18]. Thus, the Egyptian pharmacopeia is composed by hundreds of products collected and/or transformed from local flora and fauna.

In fact, Egyptian vegetal ingredients are mostly related to endemic specimens. However, our lack of knowledge about the Egyptian vegetal world posits a great obstacle to connect Egyptian names to actual plants. Therefore, traditional works by Egyptologists keep the Egyptian names untranslated [1, 18, 19].

A small lexicon follows, which complements the glossary at the end of this work.

Vegetal

- Vitex (*vitex agnus castus*). Case XIII - Its leaves, flowers, seeds and roots can be consumed with food or as an elixir. There is clinical evidence that it works to treat premenstrual tension [20].
- White Mullberry (*Morus alba*). Cases X, XII e XVI - Its extract has several medicinal properties. Here we highlight its effect with antibacterial, and in the treatment of hyperuricemia [21].
- Onion. Case XXVIII
- Beer. Case VI (to avoid it)
- Sweet beer. Cases XX e XXIV
- Fermented/ardent beer. Case X – Normally that term is translated as “djadjat-beer”. It is a beer, fermented in some specific way. As the term djadjat is synonymous with “ardent”, it can be a particularly strong beer.
- Cowpea (*Vigna unguiculata*). Case XXXIII
- Ripe figs. Case XVI
- Fruit (any). Cases III e XVII
- Fruit of the Onenu-tree. Case XX – Thus far an unidentified tree.
- Fruit of Egyptian balm (*Balanites aegyptiaca*). Case XVI - It was necessary to resort to the Hieratic text to propose the replacement of the unknown term for . The sacred “ished” is a mythical tree referred to in the Book of the Dead spell 335. That passage mentions that it grows in the domain of the gods. A possible translation of “ished” is pistachio (*Pistacia vera*). However, the Egyptian balm is still used in Africa as a medicinal plant. It is employed to fight parasitic infection, headaches and liver disorders. Plus, its fruit is also indicated for stimulating lactation, while the bark of the tree is a natural abortive [22, 23].
- Fat/oil/unguent. Cases V e XVI
- Incense. Cases I, V, XX

- Watery porridge. Case VI
- Vegetal mucus of fermented mucilage. Case XIV
- Vegetal mucus of mixed mucilage. Case XIV
- Fermented vegetal mucus. Cases XX, XXI e XXIII
- Pulp of date (for syrups). Case XXIV
- Dregs of sweet beer. Cases XVII e XXVII
- Myrrh resin. Case XII
- Chufa (*Cyperus esculentus*). Cases III, X, XIII
- Oil/unguent (new). Cases I, IV e XX
- Grapes. Case XVI
- Date syrup. Cases XVII, XX e XXVII

Animal

- Cow milk. Cases III e XV
- Donkey/ass liver (fresh). Case I
- Honey. Case XXII
- Lard/fat of goose's leg. Case I
- Milk. Case XVIII

Mineral

- Donkey/ass urine. Case V
- Fermented beer. Case X
- Malachite powder. Case XV - This is a magical ingredient [18]. The mineral was used as a pigment for the green colour. In Egyptian, the same word can be used for naming “vigor”, “vitality” and “freshness”. Thus, by consuming the green pigment, one also acquired the properties that the magic pun (*rebus*) [24] provided in via “*sympatheia*”.
- Mud. Case VII
- Natron. Case XXIII
- Spring water. Case XXV

Unidentified origin

- Emetic. Case XI (Its ingredients are not described)
- Fresh fat rancid oil. Case XII (It is not clear whether the fat is animal or vegetal).

2.6 Index of cases

COLUMN 1:

- I – Pain in the eyes and throat; vision problems (lines 1–5);*
- II – Pain in the uterus (lines 5–8);*
- III – Pain in the lower limbs (lines 8–12);*
- IV – Abdominal and genital pain (lines 12–15);*
- V – Pain in the teeth and neck (lines 15–20);*
- VI – Pain in the limbs and eye sockets (lines 20–22);*
- VII – Pain in the feet and legs when walking (lines 23–25);*
- VIII – Pain in the throat, ears and groin; hearing problems (lines 25–27);*
- IX – Pain in the limbs, vulva and entire body (lines 27–29);*

COLUMN 2:

- X – Urinary problems (lines 30–34);*
- XI – A woman who cannot get out of her bed (lines 34–36);*
- XII – Pain in the legs (lines 36–40);*
- XIII – Pain in the legs and on the side of (a) ... (lines 40–47);*
- XIV – Thirsty for ... (lines 47–49);*
- XV – Swelling in the groin (lines 49–50);*
- XVI – Pain in the limbs and in the eye sockets (lines 51–54);*
- XVII – Hemorrhage ... (lines 54–59);*

COLUMN 3:

- XVIII – Sexual stimulant (line 1);*
- XIX – Pregnancy diagnosis (lines 2–3);*
- XX – Intoxication due to pregnancy medication (lines 3–6);*
- XXI – Prevention of ... (line 6);*
- XXII – Contraceptive (line 7);*
- XXIII – Treatment for ... (lines 7–8);*
- XXIV – Muscle cramp (trismus) of the uterus (lines 8–9);*
- XXV – Fever (lines 9–11);*
- XXVI – Pregnancy diagnosis (lines 12–14);*
- XXVII – Pregnancy diagnosis (lines 15–17);*
- XXVIII – Pregnancy diagnosis (lines 17–19);*
- XXIX – Pregnancy diagnosis (lines 19–20);*
- XXX – Pregnancy diagnosis (lines 20–23);*
- XXXI – Pregnancy diagnosis (lines 23–24);*

XXXII – *Pregnancy diagnosis (lines 24–26);*
XXXIII – *Prevent trismus during childbirth (lines 25–26);*
XXXIV – *Urinary problem (lines 27–28).*

IntechOpen

IntechOpen

3. Hieroglyphic text, transliteration and translation

COLUMN 1

No. I

¹ šs3w s.t jr.tj=sj mr n(j) m33.n=s ḥr mn nḥb.t=s [...]

[illegible]² dd.hr=k r=s h3w pw n jd.t m jr.tj=sj jr(j).hr=k r=s [...]

³

³ k3p sj ḥr snṯr ḥr mrḥ.t-m3w.t k3p

[illegible]

⁴ k3.t=s ḥr=s k3p jr.tj=sj ḥr jns.wt n.t gnnw

[illegible]⁵ rdj.hr=k wnm=s mjs.t n.t 3 w3d

Translation

¹ Treatment of a woman whose eyes are aching till she cannot see, on top of aches in her neck: ² you should say to her: "it is discharges of the womb in your eyes!".

You should treat her: ³ fumigate her with incense and fresh oil, fumigating ⁴ her vulva with it, and fumigating her eyes with goose leg fat. ⁵ Then, you should give her to eat a fresh donkey liver.

No. II

5 6

⁵ šš3w s.t mr n(j) ⁶ jd.t=s m ḥp(j) ḏd.ḥr=k r=s ptr ssn.t(=t)

jr dd=s n=k jw=j⁷ hr ssn.t žšr dd.hr=k r=s nmsw

pw n jd.t jr(j).ḥr=k r=s⁸ k3p sj ḥr ssn.t=s nb.t m 3šr

Translation

⁵ Treatment of a woman in pain. Her ⁶ womb does not deliver (its period). You should say to her: “What do you smell?”. If she says to you: “I ⁷ smell some roasting.”

Then you should say to her: “This is some effusion of the womb!”. You should treat her: ⁸ fumigate her with anything it smells like roast.

No. III

8 9

⁸ šs3w s.t hr ⁹ mn ph(.wj)=sj kns=s w3bw n mn.tj=sj

dd.hr=k r=s ¹⁰ h3w pw n jd.t jr(j).hr=k r=s wch š3š3 qd

¹¹ jr.t t hnw 1 pf srf sqbb jr(j) m htjw w.t ¹² swrj

m dw3.t 4

Translation

⁸ Treatment of a woman ⁹ aching in her hear, groin and perineum. You should say to her: ¹⁰ “These are discharges of the womb!”.
Then, you should treat her: 1 qd of chufa (*cyperus esculentus*), 1 qd of fruit, 1 hin of ¹¹ cow milk. Boil, let it cool down, ¹² drink on 4 mornings.

No. IV

šs3w s.t hr kns=s k3.t=s ¹³ d3d3.t n.t k3.t=s jmj.tj hpd.w(j)=s(j)

dd.hr=k r=s s3 wr ¹⁴ n ms(j).t jr(j).hr=k r=s mrh.t m3w.t

hnw 1 jwh ¹⁵ k3[.t=s] m [...].t=s

Translation

¹² Examination of a woman: regarding her groin, vulva and ¹³ the circuit of her vulva, between her buttocks. You should say to her: “Big dilatation ¹⁴ of birth!”.
Then, you should treat her: 1 hin of fresh oil. Pour on her ¹⁵ vulva and her [...].

No. V

¹⁵ šs3w s.t hr mn jbh.w=s nh.t=s n(j) ¹⁶ rh[.t] ns(q)

r(3)=s dd.hr=k r=s tj3w pw n jd.t jr(j).hr=k r=s ¹⁷ k[3]p.jn=k sj

hr mrh.t sntr m d3d3w jwh m ¹⁸ [...]=s mwy.t

n.t 3 qm3y snw=f hrw 1 n wš=f sj ¹⁹ [...] j[r]

mn=s [kn]s=s r mn [m] h3[b]w=s r mn m hpd.w=s

20

²⁰ btw pw

Translation

¹⁵ Treatment of a woman aching in her teeth and throat to the point that she ¹⁶ cannot bite or [...] her mouth. You should say to her: “It is a trismus of the womb!”.

Then, you should treat her ¹⁷: after fumigating her with incense in a djadjaw-pot, pour on her ¹⁸ [...] the urine of a donkey that has “created its second” the day after it was feed. ¹⁹ If her pain is situated from the bellybutton to her buttocks, it is a demon (untreatable).

No. VI

[illegible]

²⁰ šš3w [s.t] mr n ʿ.wt=s nb.t ḥr mn b3b3w n

[illegible]

²¹ jr.tj=sj dd.hr=k r=s g3.t pw n.t jd.t n hpr nn sswrj

ḥnq.t [...] ²² qd m ms(j).t w3d.t jr(j).ḥr=k r=s ḥsb 1 n 3ḥ ḥr mw

```
swrj dw3[.t] 1 [+ x]
```

Translation

²⁰ Treatment of a woman aching her limbs and ²¹ eye-sockets. You should say to her: “It is some deprivation of the womb! No beer-drinking ²² shall grant a healthy birth!”.

Then, you should treat her: 1 hsb of watery porridge. Drink it on 1 [+ x] mornings.

No. VII

23

²³ ššw s.t hr mn rd.wj<t>=sj w'r.tj=sj m-ḥ.t šm.t

𐀀𐀃𐀆𐀇𐀈𐀉𐀊𐀋𐀌𐀍𐀎𐀏𐀐𐀑𐀒𐀓𐀔𐀕𐀖𐀗𐀘𐀙𐀚𐀛𐀜𐀝𐀞𐀟𐀠𐀡𐀢𐀣𐀤𐀥𐀦𐀧𐀨𐀩𐀪𐀫𐀬𐀭𐀮𐀯𐀰𐀱𐀲𐀳𐀴𐀵𐀶𐀷𐀸𐀹𐀺𐀻𐀼𐀽𐀾𐀿𐁀𐁁𐁂𐁃𐁄𐁅𐁆𐁇𐁈𐁉𐁊𐁋𐁌𐁍𐁎𐁏𐁐𐁑𐁒𐁓𐁔𐁕𐁖𐁗𐁘𐁙𐁚𐁛𐁜𐁝𐁞𐁟𐁠𐁡𐁢𐁣𐁤𐁥𐁦𐁧𐁨𐁩𐁪𐁫𐁬𐁭𐁮𐁯𐁰𐁱𐁲𐁳𐁴𐁵𐁶𐁷𐁸𐁹𐁺𐁻𐁼𐁽𐁾𐁿𐂀𐂁𐂂𐂃𐂄𐂅𐂆𐂇𐂈𐂉𐂊𐂋𐂌𐂍𐂎𐂏𐂐𐂑𐂒𐂓𐂔𐂕𐂖𐂗𐂘𐂙𐂚𐂛𐂜𐂝𐂞𐂟𐂠𐂡𐂢𐂣𐂤𐂥𐂦𐂧𐂨𐂩𐂪𐂫𐂬𐂭𐂮𐂯𐂰𐂱𐂲𐂳𐂴𐂵𐂶𐂷𐂸𐂹𐂺𐂻𐂼𐂽𐂾𐂿𐃀𐃁𐃂𐃃𐃄𐃅𐃆𐃇𐃈𐃉𐃊𐃋𐃌𐃍𐃎𐃏𐃐𐃑𐃒𐃓𐃔𐃕𐃖𐃗𐃘𐃙𐃚𐃛𐃜𐃝𐃞𐃟𐃠𐃡𐃢𐃣𐃤𐃥𐃦𐃧𐃨𐃩𐃪𐃫𐃬𐃭𐃮𐃯𐃰𐃱𐃲𐃳𐃴𐃵𐃶𐃷𐃸𐃹𐃺𐃻𐃼𐃽𐃾𐃿𐄀𐄁𐄂𐄃𐄄𐄅𐄆𐄇𐄈𐄉𐄊𐄋𐄌𐄍𐄎𐄏𐄐𐄑𐄒𐄓𐄔𐄕𐄖𐄗𐄘𐄙𐄚𐄛𐄜𐄝𐄞𐄟𐄠𐄡𐄢𐄣𐄤𐄥𐄦𐄧𐄨𐄩𐄪𐄫𐄬𐄭𐄮𐄯𐄰𐄱𐄲𐄳𐄴𐄵𐄶𐄷𐄸𐄹𐄺𐄻𐄼𐄽𐄾𐄿𐅀𐅁𐅂𐅃𐅄𐅅𐅆𐅇𐅈𐅉𐅊𐅋𐅌𐅍𐅎𐅏𐅐𐅑𐅒𐅓𐅔𐅕𐅖𐅗𐅘𐅙𐅚𐅛𐅜𐅝𐅞𐅟𐅠𐅡𐅢𐅣𐅤𐅥𐅦𐅧𐅨𐅩𐅪𐅫𐅬𐅭𐅮𐅯𐅰𐅱𐅲𐅳𐅴𐅵𐅶𐅷𐅸𐅹𐅺𐅻𐅼𐅽𐅾𐅿𐆀𐆁𐆂𐆃𐆄𐆅𐆆𐆇𐆈𐆉𐆊𐆋𐆌𐆍𐆎𐆏𐆐𐆑𐆒𐆓𐆔𐆕𐆖𐆗𐆘𐆙𐆚𐆛𐆜𐆝𐆞𐆟𐆠𐆡𐆢𐆣𐆤𐆥𐆦𐆧𐆨𐆩𐆪𐆫𐆬𐆭𐆮𐆯𐆰𐆱𐆲𐆳𐆴𐆵𐆶𐆷𐆸𐆹𐆺𐆻𐆼𐆽𐆾𐆿𐇀𐇁𐇂𐇃𐇄𐇅𐇆𐇇𐇈𐇉𐇊𐇋𐇌𐇍𐇎𐇏𐇐𐇑𐇒𐇓𐇔𐇕𐇖𐇗𐇘𐇙𐇚𐇛𐇜𐇝𐇞𐇟𐇠𐇡𐇢𐇣𐇤𐇥𐇦𐇧𐇨𐇩𐇪𐇫𐇬𐇭𐇮𐇯𐇰𐇱𐇲𐇳𐇴𐇵𐇶𐇷𐇸𐇹𐇺𐇻𐇼𐇽𐇾𐇿𐈀𐈁𐈂𐈃𐈄𐈅𐈆𐈇𐈈𐈉𐈊𐈋𐈌𐈍𐈎𐈏𐈐𐈑𐈒𐈓𐈔𐈕𐈖𐈗𐈘𐈙𐈚𐈛𐈜𐈝𐈞𐈟𐈠𐈡𐈢𐈣𐈤𐈥𐈦𐈧𐈨𐈩𐈪𐈫𐈬𐈭𐈮𐈯𐈰𐈱𐈲𐈳𐈴𐈵𐈶𐈷𐈸𐈹𐈺𐈻𐈼𐈽𐈾𐈿𐉀𐉁𐉂𐉃𐉄𐉅𐉆𐉇𐉈𐉉𐉊𐉋𐉌𐉍𐉎𐉏𐉐𐉑𐉒𐉓𐉔𐉕𐉖𐉗𐉘𐉙𐉚𐉛𐉜𐉝𐉞𐉟𐉠𐉡𐉢𐉣𐉤𐉥𐉦𐉧𐉨𐉩𐉪𐉫𐉬𐉭𐉮𐉯𐉰𐉱𐉲𐉳𐉴𐉵𐉶𐉷𐉸𐉹𐉺𐉻𐉼𐉽𐉾𐉿𐊀𐊁𐊂𐊃𐊄𐊅𐊆𐊇𐊈𐊉𐊊𐊋𐊌𐊍𐊎𐊏𐊐𐊑𐊒𐊓𐊔𐊕𐊖𐊗𐊘𐊙𐊚𐊛𐊜𐊝𐊞𐊟𐊠𐊡𐊢𐊣𐊤𐊥𐊦𐊧𐊨𐊩𐊪𐊫𐊬𐊭𐊮𐊯𐊰𐊱𐊲𐊳𐊴𐊵𐊶𐊷𐊸𐊹𐊺𐊻𐊼𐊽𐊾𐊿𐋀𐋁𐋂𐋃𐋄𐋅𐋆𐋇𐋈𐋉𐋊𐋋𐋌𐋍𐋎𐋏𐋐𐋑𐋒𐋓𐋔𐋕𐋖𐋗𐋘𐋙𐋚𐋛𐋜𐋝𐋞𐋟𐋠𐋡𐋢𐋣𐋤𐋥𐋦𐋧𐋨𐋩𐋪𐋫𐋬𐋭𐋮𐋯𐋰𐋱𐋲𐋳𐋴𐋵𐋶𐋷𐋸𐋹𐋺𐋻𐋼𐋽𐋾𐋿𐌀𐌁𐌂𐌃𐌄𐌅𐌆𐌇𐌈𐌉𐌊𐌋𐌌𐌍𐌎𐌏𐌐𐌑𐌒𐌓𐌔𐌕𐌖𐌗𐌘𐌙𐌚𐌛𐌜𐌝𐌞𐌟𐌠𐌡𐌢𐌣𐌤𐌥𐌦𐌧𐌨𐌩𐌪𐌫𐌬𐌭𐌮𐌯𐌰𐌱𐌲𐌳𐌴𐌵𐌶𐌷𐌸𐌹𐌺𐌻𐌼𐌽𐌾𐌿𐍀𐍁𐍂𐍃𐍄𐍅𐍆𐍇𐍈𐍉𐍊𐍋𐍌𐍍𐍎𐍏𐍐𐍑𐍒𐍓𐍔𐍕𐍖𐍗𐍘𐍙𐍚𐍛𐍜𐍝𐍞𐍟𐍠𐍡𐍢𐍣𐍤𐍥𐍦𐍧𐍨𐍩𐍪𐍫𐍬𐍭𐍮𐍯𐍰𐍱𐍲𐍳𐍴𐍵𐍶𐍷𐍸𐍹𐍺𐍻𐍼𐍽𐍾𐍿𐎀𐎁𐎂𐎃𐎄𐎅𐎆𐎇𐎈𐎉𐎊𐎋𐎌𐎍𐎎𐎏𐎐𐎑𐎒𐎓𐎔𐎕𐎖𐎗𐎘𐎙𐎚𐎛𐎜𐎝𐎞𐎟𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂

$$\underline{d}d.\dot{h}r=k\ r=s^{24}\ h_3^c w\ pw\ n\ j d.t\ jr(j).\dot{h}r=k\ r=s\ ^c m^c m\ rd.wj=sj$$

The Great Temple of the Living Nub

$$w^c r.tj = s_j^{25} m^c m^c.t r snb.t = s$$

Translation

²³Treatment of a woman aching in her feet and legs after a walk. You should say to her: “It is a ²⁴discharge of the womb!”.

Then, you should treat her: rub her feet and legs²⁵ with mud until she is well.

No. VIII

²⁵ ²⁶
šš3w s.t hr mn nhb.t=s kns=s²⁶ msdr.wj=sj (n)n sđm.n=s mdw.t
 ²⁷
đđ.hr=k r=s nrw pw n jd.t jr(j).hr=k r=s²⁷ mjtt n tf3 phr.t n.t dr

sh3w n jd.t [...]

Translation

²⁵ Treatment of a woman aching her throat, groin and (so much)²⁶ her ears that she does not hear what it is said. You should say to her: “This is a tremor of the womb!”.

Then, you should treat her with²⁷ the same prescription for expelling residuals from the womb [...].

No. IX

²⁷ ²⁸
²⁷ šš3w s.t hr mn²⁸ k3.t=s nb.t mjtt hw(j).t đđ.hr=k r=s [...]
 ²⁹ End of Column 1
pw n jd.t jr(j).hr=k r=s²⁹ wnm mr[h].t=s [r] snb.t=s

Translation

²⁷ Treatment of a woman aching in her²⁸ vulva and all her limbs, as if she had been beaten. Then, you should say to her: “It is [...] of the womb”.

Then, you should treat her:²⁹ eating fat (a fat diet) until she is well.

COLUMN 2

No. X

[illegible]

³⁰ śs₃w s.t [h_r] mn mwy.t mj [...] mwy.t d₃dy.t

dd.hr=k r=s³¹ h3w [pw n jd.t] jr(j).hr=k r=s jwry.t pr[.t]-šnj

mw.t n.t gyw ³² nd sn[^{cc}]w hr hnq.t n d3d3.t

[illegible]

hn[w] 1 ps swrj dw3.t 4 ³³ wrš[=s] sdr.t hqr.t

[illegible]

dw3(.t)=s r swrj [hn]w 1 n-mjtt jrj wrš=s³⁴ ḥqr.t r

$$jw(j).t \text{ nw } s_3 - j^c w - r(3)$$

Translation

³⁰ Treatment of a woman aching when urinating, as if [...] burning/fermented. You should say to her: “This is ³¹ discharges of the womb!”.

Then, you should treat her: beans of white mulberry (*morus alba*) and chufa (*cyperus esculentus*).³² Grind it and dilute in 1 hin of fermented beer. Boil and drink on 4 mornings. May she³³ spend the day fasting on her bed after drinking 1 hin of the same. May she spend the day³⁵ fasting until the moment of washing her mouth.

No. XI

34 35

³⁴ šš3w s.t ḥr mr.t n(j) dwn=s n(j) jw=s ³⁵ ḥr [sd]3.t=f

[illegible]

$\underline{d}d.\dot{h}r=k\ r=s\ 3mmw\ pw\ n\ [jd.t]\ jr(j).\dot{h}r=k\ r=s\ rdj.t\ swrj=s\ hnw\ 2\ n$

36

³⁶ ḥ3wj rdj q3^c=s st ḥr-^c.wj

Translation

³⁴ Treatment of a woman bed-bound, without standing or ³⁵ moving. You should say to her: “This is a weakness of the womb!”.

Then, you should treat her: let her drink 2 hin of ³⁶ emetic and have her to throw it up at once!

No. XII

³⁶ šs3w s.t hr mn w^r.tj=sj rdj.hr=k r=s ³⁷ stpw n h3tjw
[...] ³⁸ thb m 'ntjw [...] st [...] ³⁸ ndm m jr(j).n=s
[...] ³⁹ h.t nb.t snb pw jr jjjw [...] pw n jd.t jr(j).hr=k r=s ³⁹ mhwj
[...] ⁴⁰ n mr[h.t] m3.t jwh [...] =s ⁴⁰ rdj 'ntjw

m [...] =s r-s3 jrj.t nn

Translation

³⁶ Treatment of a woman aching in her legs. You should give to her ³⁷ bandages soaked in resin of myrrh [...] it [...]. [If ...] ³⁸ sweet, after she has done all that, it means health. If what leaves is [...] “This is [...] of the womb!”.

Then, you should treat her: ³⁹ fresh rancid oil. Pour over her [...]. Place resin of myrrh on her [...] after doing this.

No. XIII

⁴⁰ šs3w s.t [...] w^r.tj=sj ⁴¹ w3.t=s w^r.t [...] w=s
[...] ⁴² dd.hr=k r=s q'hw [...] pr.t- ⁴² šnj s'3m mw.t
[...] ⁴³ n.t gyw [...] w3.t ⁴³ mn.t=s st hr=s [rdj sdr]=s hr=s jr
[...] ⁴⁴ phr r [...] 2 ⁴⁴ wš'=s s[...] hsb 2 psš m
[...] ⁴⁵ [...] =s ⁴⁵ jr wš=s [...] m jr(j).n=s h.t nb.t [...] =s
⁴⁶ šfw.t ⁴⁶ rdj.hr=k db3=k hr=[s r gm]m=k st rwd(.t) [...] hr
⁴⁷ jd.t [...] ⁴⁷ btw pw

Translation

⁴⁰ Treatment of a woman [...] her legs and on ⁴¹ one side of her [...]. You should say to her: “(This is a) bulge [...]”.

[Then you should treat her:] beans of white ⁴² mulberry (*morus alba*), chaste-tree (*vitex agnus castus*), and chufa (*cyperus esculentus*) [...] on the side she ⁴³ aches, and let her lay down on her side. If [...] circulates [...] 2, ⁴⁴ divided in her [...]. ⁴⁵ If she itches [...] it means she did all things [...] a swollen, ⁴⁶ then you should place your finger on it until you find it firm [...] on the womb, it is a demon (untreatable).

No. XIV

[illegible]

⁴⁷ šs3w s.t jb.t [...] jr(j).ḫr=k r=s ⁴⁸ ḥs3 šbb jmj

 [...] 49

ḥs3 ʿwy.t [...] ⁴⁹ ḥr-qd

Translation

⁴⁷ Treatment of a woman thirsting [...].

Then, you should treat her: ⁴⁸ vegetal mucus of a mixed mucilage and vegetal mucus of a fermented mucilage [...] ⁴⁹ completely.

No. XV

49 [...] 50

⁴⁹ šs3w s.t kns=s šf(w) [...] jr(j).hr=k r=s ⁵⁰ w3dw qd (1) nd

sn^c ps ḥr jrt.t mh[r] [...] 3 (+ x)

Translation

⁴⁹ Treatment of a woman with a swollen groin [...].

Then, you should treat her:⁵⁰ (1) qd of malachite powder. Grind, refine and boil in 1 jar of cow milk [...] 3 [+ x].

No. XVI

[illegible]

⁵¹ šš₃w s.t ḥr mn ʿ.t nb.t b₃b₃w.w nw jr.tj

52

[...]=s km.t ⁵² dd.ḥr=k r=s km.wt pw n jd.t jr(j).ḥr=k r=s

mrḥ.t jmj [...] jšd⁵³ j3r.t nq^c.wt

COLUMN 3

No. XVIII

¹

¹ k.t r sh3j s.t m h3j gs n b3d.t n.t jrt.t [ms ...]

b3d.t [...] ² smn jwh m k3.t=s

Translation

¹ Another one, for unveiling a woman while copulating. Half of a scoop of milk [...] scoop [...] ² let it stabilize. Pour it in her womb.

No. XIX

²

² sj3 ms.tj=sj m jd.t n.t s.t jr ʿnn 3bd ʿq [...] ³ [...] nw

sbn.t [...]

Translation

² Noticing a child inside the womb of a woman. If month ends and month starts [...] of nursing [...] ³ [...].

No. XX

³

³ jr hw(j).t m phr.t n.t sjwj hr-s3 fdq ʿnnw.t [p ...]

⁴

⁴ nḏ sn^c s[h3k]w m [h]bsw hr ḥs3-ʿwy.t

jwh m h3yw [...] ⁵ snṯr mrh.t [bnj]w

ḥnq.t nḏm.t rdj m-ḥnw šdj m tk3w k3p.hr[=k ...]

⁶

⁶ m nḏm-r(3)

Translation

³ If a woman was stricken by some prescription for pregnancy. After severing the fruit of an Onnw-tree, [...] ⁴ Grind and refine, by filtering with a clothing with fermented vegetal mucus. Bath with waves [...]. ⁵ Incense, new oil, date syrup and sweet beer. Give it to a burning vessel. Then, you should burn [...] ⁶ as a sweetener of the mouth.

No. XXI

⁶ tm [...] ḥs msh wgp ḥr ḥs3 ʿwy.t

[...]

thb [...]

Translation

⁶ For preventing [...]. Crocodile dung. Pound it with fermented vegetal mucus, immersed (in) [...].

No. XXII

⁷ k.t phr.t hnw [n] bj.t jwh [m] k3.t=s jr(j).t nn ḥr shm

n ḥsmn

Translation

⁷ Another prescription: (1) hin of honey. Pour it into her vulva. This is to be done together with a natron contraceptive.

No. XXIII

k.t [...] ⁸ ḥr ḥs3 ʿwy.t [j]wh m k3.t=s

Translation

Another one [...]. ⁸ with fermented vegetal mucus. Sprinkle inside her vulva.

No. XXIV

⁸ dr tj3w pw n jd.t wḏ n bnjw ḥr [...] ⁹ qnqn

smnh ḥr (sic) ḥnq.t nḏm.t rdj ḥms(j)=s ḥr=s wpw mn.t(j)=sj

Translation

⁸ This is for removing muscular pains of the womb. Date palm pulp with [...]. ⁹ Crush it and reduce it in sweet beer. Let her sit on it with her legs apart.

No. XXV

⁹ šs3w s.t t3w [...] ¹⁰ jw jr.tj=sj d3y(.t) ḥpr-wr ḥ3

[...] ¹¹
 hr j3b n ms(j)-t3 š jwh fdq [...] ¹¹ dw3.t 4 rdj.hr=k
[...]
 hms=s hr mw n š rdj [j ...]

Translation

⁹ Treatment of a woman burning (with fever) [...], ¹⁰ her eyes are harmed. Wild carrot. Spread on the left side of the “msta” (birth brick?) with spring water. Sprinkle and sever [...]. ¹¹ 4 mornings. Then, you should let her siting on the water of [...] spring water. Give [...].

No. XXVI

¹²
¹² sj3 ntt r jwj r ntt nn jwr [jr(j)].hr=k mrh.t
[...] ¹³
 m3.t hr [...] ¹³ [...].hr=k sj jr gm(j) mtjw n q3b.t=s
End of Line 13
 h3š3 dd.hr=k r=s ms(j).t pw
¹⁴
¹⁴ jr gm(j)=k [s]t knkn dd.hr=k r=s jw=s r ms(j).t wdf jr
[...]
 swt gm(j) sj mj jrn [...]

Translation

¹² Determining a woman who shall conceive from one who shall not. You should prepare: new fat and [...]. ¹³ Then, you should [...]. If the muscles of her breasts are showing some bulging, you should say to her: “This is pregnancy!”. ¹⁴ If you find it in a normal state, you should say that she will give birth late. However, if you find her something like [...].

No. XXVII

¹⁵
¹⁵ ky-sp rdj.hr=k hms=s hr s3tw shr m t3h.t n.t hnq.t
[...] ¹⁶
 ndm.t rdj dq3 [...] bnjw [...] ¹⁶ qjs jw=s r ms(j).t jr

 grt tnw qjs nb ntj r pr(j).t m r(3)=s tnw
[...] ¹⁷
 ms(j) [...] ¹⁷ [jr] gr.t tm=s qjs nn ms(j)=s r nhh

Translation

¹⁵ Another time. You should let her sit on the ground prepared with dregs of sweet beer. Put some fruit [...] date syrup [...]. ¹⁶ vomits, she will give birth. Indeed, every time some vomit leaves her mouth it means a birth. ¹⁷ However, if there is no vomit at all she will never give birth.

No. XXVIII

¹⁷ [...]

¹⁷ ky-sp rdj.hr=k t3 n h3w r(3) m h.t [...] =f jm [...]

¹⁸

¹⁸ s[...] gmy=k sw jm=f dd.hr=k r=s jw=s r ms(j).t

jr tm=k gm(y=k) [...] hn.t=s [...] ¹⁹ nn [ms(j)=s r nhh]

Translation

¹⁷ Another time. You should give an onion bulb on the mouth (entrance) of her belly [...] it [...] there. ¹⁸ [...]. (If) you find in it, then you should say to her that she will give birth. If you do not find [...] her face [...] ¹⁹ she will never give birth.

No. XXIX

¹⁹ [...]

¹⁹ ky-sp ndr.hr=k r=s hr šsp=s hn.t-db=k hr-hrjw mnj3=s [...] (n)hq [...]

²⁰

²⁰ j[r ...] tm nhq nn ms(j)=s r nhh

Translation

¹⁹ Another time. You should press her hand with the tip of your finger on her point of pressure. [...]. Pain [...]. ²⁰ If [...] there is no pain, she will never give birth.

No. XXX

²⁰ [...]

²⁰ ky-sp bhs pwy n Hr [...] ²¹ [...] jw=j hr [...] Hr ts-phr(w)

h3(j)=k r bw n [...] =k jm dd.tw r(3) [...] ²² [...] jr

h3(j) m šr.t=s jw=s r ms(j).t jr h3(j) m k3.t=s jw=s r ms(j).t jr

gr.t [...] ²³ [...] =s r nhh

Translation

²⁰ Another time. Oh that calf of Horus! [...] ²¹ that I am with [...] Horus and vice-versa. Go down to the place which you [...]. The formula to be said is: [...] ²² [...]. If it comes down from her nostril, she will give birth. However, if it comes down from her vulva, so [...] ²³ [...] she will never (give birth).

No. XXXI

²³

²³ ky-sp jr m33=k hr=s w3d m w3d swt gmy=k h.t hr=s

mj [...] ²⁴ [...] =j jr gr.t m3.n=k h.t hr jr.tj=sj nn

ms(j)=s r nhh

Translation

²³ Another time. If you see her face fresh with brilliance, but find something on her like [...] ²⁴ [...]. If you find anything on her eyes, she will never give birth

No. XXXII

²⁴

²⁴ sj3 ntt jw(y.t) [...] ²⁵ [...] mjtt pf3 db hr mnj3

Translation

²⁴ Determining the one who will conceive [...] ²⁵ [...] like that of the finger on the pressure point.

No. XXXIII

²⁵

²⁵ tm rdj tj3 s.t [...] jwy.t nd m [...] ²⁶ [...]

[...] =s r nhd.t=sj hrw n ms(j)=s dr tj3w [pw]

šs-m3 h n (sp)

Translation

²⁵ Preventing contractions in the chewing muscles of a woman. [...]. Cowpea (*vigna unguiculata*). Grind it with [...] ²⁶ [...] for her teeth the day she gives birth will drive away the pain on her chewing muscles. This is something really good, (tested) a million (times).

4. Some final remarks

The ancient Egyptian medical papyri are an important source to understand the Egyptian approach to health treatment. Ancient Egyptian therapeutics were as equally familiar with pharmacy as they were with medicine and incantations. Thanks to the medical papyri, we know details about many of their treatments and prescriptions for diseases. They call for the treatment of many disorders and the use of a variety of substances, plant, animal and mineral.

However, the essential nature of Egyptian healing is deep-seated on religious notions. Hence, magical practices are wholly integrated with empiric-rational approaches to form an integrated but multi-faceted medical therapy.

Traditionally, Egyptology reproduces ideological prejudices regarding the ancient Egyptian medicine empiricism. All supernatural elements are normally treated as mere superstition or, in the best cases, a tool for some placebo effect. On the other hand, though a neurolinguistic approach it becomes clear how intimate was the relation between physical health and spiritual order (in opposition to the cosmic forces of chaos).

One of the main problems on dealing with medical papyri is that they usually do not check or advance with the study of the provided vocabulary. An interesting point for the benefit of Egyptology would be the review of all medical papyri in search of better information about their technical vocabulary, pharmacopoeia, medical substances, and the like.

Such study also considers the proposition of an ontology and semantic analysis. Per definition, ontology, describes the concepts of medical terminologies, practices, and the relation between them, thus, enabling the sharing of medical knowledge. Ontology-based analyses are associated with a tool to represent medical knowledge, thus relying more on the computer science-based understanding of medical terms. This approach is useful for a data entry system, in which the users merely need to browse the hierarchy and select relevant terms.

The language (logos) is the key for a culture's mentality (nous). Thus, it is impossible to deal with language without analysing the thought it's portraying. A Semantic approach aims for the real-world scenario of dealing with grammatically complex terms, which are documented in the ancient Egyptian native language.

The essential nature of Egyptian healing links religious notions and so-called magical practices wholly integrated with empiric-rational approaches to form an integrated but multi-faceted therapeutic.

There are three points to be debated by our source' analysis. Firstly, the usage of a noun, usually translated as "demon", as a synonym for incurable diseases. In case the word is taken literally, then the treatment would be incomplete. Since a "demon" could have been identified and/or exorcized, the therapeutics rather closed the case and move on. Thus, it is most likely the term is here employed as a "harmless" technical term for an untreatable condition.

Secondly, there is a verb, which is synonym with "exorcizing" (evil spirits), although it is here employed in the technical sense of dismissing pain and the expelling of any material residuals from the patient's uterus. By the second time,

the term assumes a non-magical usage as a technical jargon. Then, the *materia prima* identifies a magical ingredient: malachite powder. This ingredient would act via the principle of *sympatheia*, as it would restore one's health, thanks to a magical pun (*rebus*) relating malachite, the green colour, and the Egyptian word for "vigor" and "freshness".

Finally, another case shows a fragment of a prayer to Horus in its therapeutics; listed as part of the recommended treatment.

During the preparation of this conclusion, our first impulse was to reduce the words "demon" and "to exorcize" as metaphors, embedded by something as an Ancient Egyptian medical terminology. Then, oppose them to the hymn to Horus and the malachite powder as "magical" elements. However, that would just replicate our prejudice against Egyptian medicine, as we would reproduce the labels of "natural" and "supernatural" as necessary and antagonist categories.

The lack of exorcisms, indexes of demons and magical ingredients (such as amulets) does not "purge" the papyrus from its divine, mythical and magical aspects. The concept of cure is different from the semantic field of the word cure. The cure also performs a transcendent effect, for it changes the patient's destiny. Such effect presupposes some previous formal divine consent.

Therefore, the therapeutics consists of attempts to change the individual destiny. Thus, the transcendent world was unequivocally behind the success or failure of any medical treatment.

Acknowledgements

This book had the support of CHAM (NOVA FCSH/UAc), through the strategic project sponsored by FCT (UIDB/04666/2020).

Further reading

- Frandsen, Paul John. "The Menstrual "Taboo" in Ancient Egypt." *Journal of Near Eastern Studies* 66, no. 2 (2007): 81 – 106.
- Györy, H. "Interaction of Magic and Science in Ancient Egyptian Medicine" in Zahi Hawass, ed. *Egyptology at the Dawn of the Twenty-first Century, Proceedings of the Eighth International Congress of Egyptologists Cairo 2000*, Cairo: American University in Cairo Press, 2003, pp. 276 – 83.
- Györy, H. 'Some aspects of magic in ancient Egyptian medicine' in P. Kousoulis (Ed.) *Ancient Egyptian Demonology –Studies on the Boundaries between the Demonic and the Divine in Egyptian Magic*, Leuven: Peeters, 2011, pp. 151 – 167.
- Johansson, T. The significance of believing in healing – on the therapeutic value of spoken words in ancient Egyptian medical papyri. University essay from Uppsala universitet/Institutionen för arkeologi och antik historia, 2019.
- Kousoulis, P. I. M. "Dead entities in living bodies: The demonic influence of the dead in the medical texts" In J.-Cl. Goyon, C. Gardin (Eds.) *Proceedings of the Ninth International Congress of Egyptologists – Actes Du Neuvième Congrès International Des Égyptologues*. Leuven: Peeters Publishers, 2007, pp. 1043 – 1050.
- Leitz C. P. D. *Magical and medical papyri of the New Kingdom*. London: British Museum Press for the Trustees of the British Museum, 1999.
- Buchheim, L. "Abortus, Konzeptionsverhütung und Menschwerdung im alten Ägypten" In *Deutsche Ärzteblatt-Ärztliche Mitteilungen* 61, 45 (1964): 2371 – 2375.
- Haimov-Kochman, R. "Reproduction concepts and practices in ancient Egypt mirrored by modern medicine" in *European Journal of Obstetrics and Gynecology and Reproductive Biology*, Volume 123, ISSUE 1 (2005): 3 – 8.
- Morice, P.; Josset, P.; Colau, J.-C., "Gynécologie et obstétrique dans l'ancienne Egypte", in *Journal de Gynécologie obstétrique et Biologie de la reproduction*, vol.23-2 (1994): 131 – 136.
- Morthon, R.S. "Sexual attitudes, preferences and infections in ancient Egypt" in *Genitourin Med.* (1995) 71: 180 – 186.
- Nelson, G. S. "Ancient Egyptian obstetrics and gynecology" in *Proceedings of the 10th Annual History of Medicine*, Calgary: The University of Calgary, 2001.
- O'Dowd, M. J.; Philipp, E. E. *The History of Obstetrics and Gynecology*. New York: Parthenon Publishing Group, 1994.
- Philippe, M., *La gynécologie et l'obstétrique en Egypte pharaonique*, thèse de docteur en médecine, Paris V, 1992.
- Richard, M. – C. *Pharmacognosie et Traitements Gynecologiques en Egypte Ancienne*. Thèse d'Exercice pour le Diplôme d'Etat de Docteur en

Pharmaciesoutenueà l'Université François Rabelais/UFR des Sciences
Pharmaceutiques de Tours, 2014.

- Sullivan, R. "Divine and rational: the reproductive health of women in ancient Egypt" in *Surv. Obstet. Gynecol.* 52 (1997): 635 – 642
- Vernus, P., "Une théorie étiologique de la médecine égyptienne: les souffles vecteurs de maladie, in *Revue d'Égyptologie*, vol.34 (1982-1983): 121 – 125.
- Von Lieven A.; Quack, J. F. " Ist Liebe eine Frauenkrankheit? Papyrus Berlin P 13602, ein gynäkomagische Handbuch " in Martin, C. J.; Hoogendijk, F. A. J.; van Heel, K. D. Hieratic, Demotic and Greek Studies and Text Editions Of making many Books There is no End: Festschrif in Honour of Sven P Vleeming P.L. Bat 34, Leiden/Boston: Brill, 2018, 257-274.
- Walker, J. "The place of magic in the practice of medicine in ancient Egypt" In *Bulletin of the Australian Centre for Egyptology* 1 (1990): 85 – 95.

IntechOpen

Glossary

Numerals

w^c.t – one (feminine)

snw – second

1

2

3

4

ḥḥ – a million

Fractions

gs 1/2 (half)

Measures

ḥsb – hesb (20, later, 16 hekat)

qd – (1/4)3 de hekat = 1/64 hekat

hnw – hin (1/10 hekat)

Generic measurements

b3d.t – spoon

mh[r] – jar

3 -

3bd – month

3mmw – anemia

3ḥ – porridge

3šr – roast

J -

=j – suffix pronoun: I, my

j3b – left hand/side

j3r.t – grape

j^c(j) – to wash; to clean

jjjw – to leave

jw – Subordination marker

jw(j).t – to come

jwh – to hydrate, to wet

jwr(j) – to conceive, to be impregnated
jwry.t – beans, cowpea (*vigna unguiculata*)
jwhw – fruit
jbh.w – teeth
jb.t – to be thirsty
jm – there
jmj – together with
jmj.tj – in between (of two referential objects)
.jn – sequential verbal affix: “after x”
jns.t – tight
jr – if, when, in case of
jrj – on that regard, about that, that
jr(j) – to do, to deal, to treat
jr(j) m htjw wꜥ.t – to make a sole masse (to mix, to homogenize)
jr.tj – eyes (dual)
jrꜥ.t – (cow) milk
jšd – Egyptian balm (*balanites aegyptiaca*)
jd.t – womb

‘ -

3 – donkey, ass
ʿwt – arms, members, limbs
ʿwy.t – fermented mucilage
ʿmꜥm – to lubricate, to rub
mꜥ.t – mud
ʿnn – to leave
ʿnnw.t – fruit of the Onenu-tree
ʿntjw – resin of myrrh
ʿq – to enter

W -

w3bw n mn.tj=sj – the root of her tights (perineum?)
w3.t – lateral; side
w3d – green, fresh, vigor, vitality, freshness
w3dw – malachite powder
wꜥr.tj – legs
wꜥh – chufa (*cyperus esculentus*)

wpw – to separate
wnm – to eat, to consume
wnn – to exist
wrš – to spend the day
wš – to scratch
wš^c – to chew
wš^cw – to feed, to devour (for animals)
wgp – to smash, to triturate
wd^c – pulp of dates
wdf – to hesitate, to be late

B –

b3b3.w – cavities
bw – local
bnjw – date syrup
bhs – calf
btw – evil doer (demon); untreatable disease

P –

pw – demonstrative pronoun: this (is); copula particle
pwy – demonstrative pronoun: this (is) vocative
pf – that
pr(j).t – (to) exit
pr[.t]-šnj – white mulberry (*morus alba*)
ph(.wj) – tail, back, back side
phr – circular
phr.t – prescription, medication
ps – to heat, to boil, to cook
psš – to divide
ptr – what (is)

F –

=f – suffix pronoun: he, his
fdq – to sever

M –

m – in, with, as, like, from
m-ḥ.t – after

m-hnw – inside

m-gs-hr(j) – upside

m33 -to see

m3w.t – new, recent

mj – like, as

mjtt, mtt – the same way, similar, likewise, just like that, the same as

mjs.t – liver

mw – water

mwy.t – urine, to urinate

mwy.t m s.t qsn.t – to urinate with local pain or difficulty

mw.t – mother

mw.t-rmt – mother of persons (twins?)

mw.t – tuberculum

mn – pain, aching, suffering

mn – to situate

mnj3 – point of pulse

mr – pain

mr.t – to be in love with a bed (to be bedridden)

mrh.t – oil, fat, ointment, unguent

mrh.t-m3w.t – new oil

mhwj – rancid oil

mn.t(j) – upper tights

msh – crocodile

ms(j).t – to give birth

ms(j).t(j)=sj – the birth of two children (dual)

ms(j)-t3 – birth-earth (?)

mtjw – tendon, muscle

mdw.t – what is said

N –

n – of (masculine or common); .n – verbal affix (indirect conjugation)

n-mjtt – according to, the same as, like

n(j) – negative particle

n.t – of (feminine)

nw – of (plural)

nw – time, moment

nb – substantive: lord, owner; adjective: all, entire, each, any
nb.t – substantive: lady, owner; adjective: all, entire, each, any
nmsw – effusion
nn – this, those, these
nn – negative particle
nrw – tremor; convulsion
nhq – pain
nhb.t – throat, neck
nhd.t – tooth
nq^c.wt – ripe figs
ndm-r(3) – sweetener of the mouth (breath candy)
ntj – which, that, who (masculine)
ntt – which, that, who (feminine)
nd – to grind
ndm – sweet
ndr – to press, to force

R –

r – for, to, than
r-nhh – forever, eternally (in negative sentences, never)
r-s3 – after
r(3) – mouth
[...] Fim da coluna 2
rwd(.t) – rigid; firm; hard
rh[.t] – to know, to be able to
rdj – to give, to allow, to apply (medicine)
rd.wj – feet

H –

h3(j) – to go down, to move, to come
h3j – to copulate
h3w – to go out
h3yw – waves
hrw – day (24 hours)

H –

h3tjw – bandages
hw(j).t – to be beaten

[h]bsw – tissue

hms – to sit

hnq.t – beer

hnq.t n d3d3.t – fermented beer

[hnq.t]-ndm.t – sweet beer

hn.t-end, extremity, edge

hn.t-db – finger point

Hr – Horus

hr – on, over, about, that, which, whose

hr-^cwj – immediately

hr-qd – completely

hr-s3 – after

hqr.t – fasting

hs – excrement

hs3 – vegetal mucus

hs3-^cwy.t – fermented vegetal mucus

hsmn – natron

H –

h3^cw – excretion

h3wj – emetic

h3š3 – bulging

hp(j) – to deliver, to menstruate

hpr – to manifest

hpr-wr – wild carrot (*daucus carota*)

hpd.w(j) – buttocks

.hr – verbal sequential affix: “and then x”

h.t – something, thing.

h.t nb.t – anything, everything

htjw – mass

H –

h3 – to pulverize

h3[b]w – bellybutton

h.t – belly, body

S –

|| =s – suffix pronoun: she, her

||\ =sj – suffix pronoun: she, her (dual)

||_ st – it, this, that

||_ sw – he, him

||_ s3tw – ground, floor

||_ sj3 – to distinguish, to notice

||_ sjwj – pregnancy

||_ swrj – to drink

||_ swt – in fact, really, after, then

||_ s3 – to dilate

||_ s3m – vitex (*vitex agnus castus*)

||_ sbn.t – to nurse, breastfeeding

||_ sn[^{cc}]w – to reduce, to dilute

||_ snb – health

||_ snb.t – to be healthy

||_ smn – to stabilize

||_ smnh – to reduce

||_ snf – blood

||_ sntr – incense

||_ srf – to heat, to warm

||_ sh3j – to reveal, to expose

||_ sh3w – residual(s)

||_ shm – contraceptive

||_ s[h3k]w – to filter

||_ shr – to clean, to prepare

||_ ssn.t – to cause an odor

||_ ss – nest

||_ sqbb – to cool down

||_ s.t – woman

||_ s.t-t3w – woman with fever

||_ s.t – local

||_ s.t-qsn.t – local difficulty

||_ stpw – bandage

||_ [sd]3.t – to move

||_ sdm.wj – ears

sdm – to hear, to listen

sdr.t – to be laying down

Š –

š – fountain

ššš – fruit

š bb – mixed mucilage

šm.t – to walk, to stroll

šfw.t – swollen

šr.t – nostrill, šs-m3^c – something really good (effective)

šs3w – treatment, diagnostic, examine

šsp – palm of hand

šdj – vessel, container

šdj m tk3w – burning vessel (brasier, ashtray, incensory)

Q –

q3^c – vomit

q3b.t – breast

qjs (= q3s) – to vomit, to puke

q'hw – arching

qm3y – to engender, to create

qnqn – to triturate

qsn.t – ill-feeling; difficulty (symptomatic)

qd – to assure; to grant

K –

k3p – to fumigate

k3.t – vulva

km.t – illness, disease

knkn – normality, normal estate

kns – groin

ky – (an)other (masculine)

ky-sp – another time

k.t – (an)other (feminine)

G –

g3.t – privation, deficiency, lacking

gyw – chufa (*Cyperus esculentus*)

gm(j) – to find

gnnw – fat from the leg of a goose

grt – in fact, really

T –

t3 – land

t3w – to heat

t3h.t – residual, dregs

t3w – painful muscular contractions, trismus,

tf3 – that

tm – negative verb (to prevent, not to do)

thb – wet, soggy

I –

t3 – bulb

t3 n hꜥw – onion bulb

tnw – each (each time x happens ... then each time y results)

ts-phr(w) – vice-versa (circular link)

D –

dw3.t – early morning

dwn – to stand

dr – to keep away, to exorcise, to expel

dq3 (= dqr) – fruit

d.t – hand

D –

d3y(.t) – wound

d3dy.t – fermented/burning beer

d3d3w – special pot to prepare medicines

d3d3.t – around

dbꜥ – finger

d3d3 – top, head

dd – to say, to tell

IntechOpen

Author details

Helena Trindade Lopes^{1*} and Ronaldo G. Gurgel Pereira²

¹ Nova Faculdade de Ciências Sociais e Humanas, FCSH, Universidade NOVA de Lisboa/CHAM - CHAM, Faculdade de Ciências Sociais e Humanas, FCSH, Universidade NOVA de Lisboa, Lisboa, Portugal

² CHAM, Faculdade de Ciências Sociais e Humanas, FCSH, Universidade NOVA de Lisboa, Lisboa, Portugal

*Address all correspondence to: mh.lopes@fcs.unl.pt

IntechOpen

© 2021 The Author(s). Licensee IntechOpen. Distributed under the terms of the Creative Commons Attribution - NonCommercial 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits use, distribution and reproduction for non-commercial purposes, provided the original is properly cited.

References

- [1] Nunn, J. F. *Ancient Egyptian Medicine*. London: British Museum Press, 1996.
- [2] Griffith, F. Ll. *The Petrie Papyri: Hieratic Papyri from Kahun and Gurob*. London: Bernard Quaritch, 1898, pp. 5-11; pl. V-VI.
- [3] Guermeur, I. "Entre magie et médecine. L'exemple du papyrus Brooklyn 47.218.2", *Égypte, Afrique et Orient* 71 (2013), pp. 11 – 22.
- [4] Grapow, H. et al. *Grundriss der Medizin der alten Ägypter*, 9 vols, Berlin: Akademie-Verlag, 1954-1973.
- [5] Stevens, J. M. "Gynaecology from ancient Egypt: the papyrus Kahun. A translation of the oldest treatise on gynaecology that has survived from the ancient world" in *Medical Journal of Australia*, 2(25–26), 949–952, 1975.
- [6] Bardinet, Th. *Les Papyrus médicaux de l'Égypte pharaonique*, Paris: Fayard, 1995.
- [7] Quirke, S. *Digital Egypt for Universities. Manuscript for the health of mother and child (Kahun Medical Papyrus UC 32057)*. 2002. <http://www.digitalegypt.ucl.ac.uk/med/birthpapyrus.html> [2020-06-05].
- [8] Collier, M.; Quirke, S. *The UCL Kahun Papyri: Religious, Literary, Legal, Mathematical and Medical*. Oxford: Archeopress, 2004.
- [9] Fournier, D. *Le papyrus gynécologique de Kahun (Petrie Museum of Egyptian Archaeology, University College London, UC 32057). Transcription-Translittération-Traduction. Considérations lexicales, syntaxiques, sémantiques, commentaires médicaux*. Paris: Éditions PAM, 2017.
- [10] Leake, Ch. D. *The Old Egyptian Medical Papyri* (= Logan Clendening Lectures on the History and Philosophy of Medicine, 2. Serie). Lawrence, Kansas: University of Kansas Press, 1952.
- [11] Reeves C. *Egyptian Medicine*. London: Shire Publications, 1992.
- [12] Stegbauer, K. *Magie als Waffe gegen Schlangen in der ägyptischen Bronzezeit*. Ägyptologische Studien Leipzig, 1, 2019.
- [13] Strouhal, E., Vachala; B., Vymazalová; H. *Medicine of the Ancient Egyptians: 1: Surgery, , Obstetrics, and Pediatrics*. Cairo: American University in Cairo Press, 2014.
- [14] Pereira, R. G. G. *Gramática Fundamental de Egípcio Hieroglífico*. Lisboa: Chiado, 2016.
- [15] Pommenering, T. "Die SsAw-Lehrtexte der heilkundlichen Literatur des Alten Ägypten. Texttraditionen und Textgeschichte." In: D. Bawanypcck, A. Imhausen (Eds). *Traditions of Written Knowledge in Ancient Egypt and Mesopotamia. Proceedings of two Workshops held at Goethe-University, Frankfurt/Main, in December 2001 and May 2012*. Alter Orient und Altes Testament, 403, Münster: Ugarit Verlag, 2014, pp. 7-47.
- [16] Hannig, R. *Grosses Handwörterbuch Ägyptisch-Deutsch*. Mainz: Philipp von Zabern, 2006.
- [17] Smith, L. "The Kahun Gynaecological Papyrus: Ancient Egyptian medicine" in *Journal of Family Planning and Reproductive Health Care* 37(1):54–5, 2011.
- [18] Rouffet, F. "Les ingrédients dans les prescriptions médico-magiques égyptiennes" in *Égypte, Afrique et Orient* 71, (2013), pp. 23 – 32.
- [19] Nunn, J. F. "Disease" in *The Oxford Encyclopedia of Ancient Egypt* (dir. D. B.

Redford), vol. 3, Cairo: The American University in Cairo Press. 2001, pp. 396-401.

[20] Verkaik, S., Kamperman, A. M., van Westrhenen, R., Schulte, P. F. "The treatment of premenstrual syndrome with preparations of *Vitex agnus castus*: a systematic review and meta-analysis". *American Journal of Obstetrics and Gynecology*. 217 (2): 150–166, 2017.

[21] Wang, C. P., Wang Y., Wang, X., Zhang, X., Ye, J. F., Hu, L. S., Kong, L. D. "Mulberroside a possesses potent uricosuric and nephroprotective effects in hyperuricemic mice". *Planta Medica*, 10 Dec 2010, 77(8): 786 – 794.

[22] Daya L., Chothani, H. U. "A review on *Balanites aegyptiaca* Del (desert date): phytochemical constituents, traditional uses, and pharmacological activity". *Pharmacognosy Reviews*. 5 (9): 55–62, 2011.

[23] Iwu, M. M. *Handbook of African medicinal plants*. Boca Raton: CRC Press, 1993.

[24] Vernus, P. "Le rébus dans l'écriture hiéroglyphique de l'Égypte pharaonique: un procédé cognitif" in: C.-A. Brisset *et al.* (Eds.) *Rébus d'ici et d'ailleurs: écriture, image, signe*. Paris: Hemisphères, 2018, pp. 45 – 65.