



The history of nursing profession in ancient Egyptian society

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ABSTRACT

Many of historical textual and epigraphical sources consider medicine as a highly advanced profession in ancient Egypt with little mention of the role of nurses in assistance and supporting this advanced medical care. The purpose of this article is to provide an overview of the history of the profession of nursing in ancient Egypt, and describe the influence of societal trends on the development of nursing. This article discusses nursing as a health care profession in ancient Egyptian civilization. It explains nurses' social background, their working conditions, their professional functions as well as health and illness beliefs that influenced their professional practice. The current article used the historical research design to answer the pre-mentioned questions in the period dated from circa 3100 BCE to the end of the Greco-Roman period 332 BCE–395 CE. The researchers conducted an in-depth review and seeking for information from experts in Egyptology, followed by gathering, drafting, reflecting on, revising, and recording the narrative of evidenced information.

1. Introduction

Ancient Egypt is considered as one of the earliest, longest-lasting and most prominent civilization in history. Although, almost of the ancient Egyptian civilization and life aspects were discovered, still certain of its mysteries that are not yet understood. The civilization of ancient Egypt is branded for its amazing achievements in all different fields, such as; art, architecture, engineering, statecraft and medicine (Time Maps, 2018). The contemporary Egyptians when they read the history of ancient Egypt, they feel so proud. In fact, because I'm an Egyptian nurse, reading the history of our ancestors (the Pharaohs) inspired me to ask, what is the value of nursing as a health care profession in ancient Egyptian civilization?

This article used the historical research design to answer the following questions; where was the nursing as a health care profession in ancient Egypt civilization? Also, what's the social background, working conditions, burden of nursing, different functions and beliefs in health and illness? To answer the pre-mentioned questions the author conducted an in-depth search of literature that was authored/written by Egyptology experts, followed by gathering, drafting, reflecting on, revising, and recording the narrative of confirmed information. The purpose of this paper is to provide an overview of the history of the profession of nursing in ancient Egypt, and describe the influence of societal trends on the development of nursing in the period from circa 3100 BCE to the end of the Greco-Roman period [332 BCE–395 CE].

2. Why especially nursing history?

Nursing has a long and rich history, yet this is rarely conveyed to current nursing students which makes them devalue the achievements of earlier nurses. Studying the history of nursing provides nurses with a realistic understanding of nursing and how this history of nursing developments, brings us to the present situation (Donahue, 1991). As such, it constructs the basis of the critical thinking and judgment skill by giving a confidence and persuading nursing staff via search for the influencing factors (Madsen, 2008). To be specific, studying nursing history allows nurses to understand more fully problems currently affecting the profession, such as pay, regulation, shortage, education, defining practice, autonomy, and unity. Present day nurses cannot effectively address these important issues without a foundation of historical knowledge (Ogren, 1994). Students also must use the evidence before them to create "the bigger picture" and encourage students to consider history-oriented subjects as a way of knowing and a form of evidence within their reflective practice. Furthermore, it creates knowledge that continues to foster and developing their nursing professional identity, it requires some cognitive skills which we wish to develop in nurses, this is how historical inquiry can enhance student learning outcomes (Smith, Brown, & Crookes, 2015).

Moreover, the study of the Egyptian nursing history helps us to enhance understanding of the social culture and certain concerns that continue to confront the profession itself. Understanding the Egyptian

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nursing history also allows nurses to expand a gratitude and appreciation of the contributions of the ancient Egyptian nurse in building this civilization (Roux & Halstead, 2009). Also, this study examines this scant area of study.

3. Challenges and opportunity of studying nursing history in ancient Egypt

Nursing history is seen by many who work in nursing as a unique structure and form of knowledge. It looks like story narration. In fact, nursing history is not only concerned with collecting and memorizing discrete facts, but it requires those studying it to understand a number of complex processes which are specific to the nursing. Historians must use a wide range of evidence to reform and rebuild the historical events, which may be incomplete, inconsistent and difficult to interpret, especially when a scholar studies a history of 5000 years ago (Masterman & Rogers, 2002). However, the ancient Egyptian documented their daily activities and beliefs by text that facilitate understanding this early civilization (Rossini, 1998). The Egyptian language was written in three non-alphabetic scripts; Hieroglyphic, Hieratic and Demotic. Each of these used a combination of pictographic/ideographic symbols and phonetic symbols. Hieroglyphics were used for monumental inscriptions and decorative texts, and Hieratic was used for administrative texts which placed more importance in content than appearance, and which needed to be written quickly. Demotic writing gained popularity, it was derived from Hieratic, but some symbols was lost (Bagnato & Prosser, 2011). Therefore, the authors of this article accessed literature (written by Egyptology experts) that explains the symbols used in the three types of writing. In this way symbols that illustrate nurses became evident.

4. Ancient Egyptian beliefs in health and illness, medical system and evidenced diseases.

In ancient Egypt, health care professions such as physician or healers were established; they were usually priests who were accountable for healing physical and psychological diseases. The priests acted as a link between humans and gods. The Egyptian believed that people had to make the Gods happy to have good health and to be in a peace of mind (Harrington & Terry, 2008). The physicians were likely trained within a temple. The medical tools were preserved in temple scriptoria (*pr-anx* “house of life”) (Ritner, 2001). According to recorded titles, we can notice that the medical community was appeared from early Dynastic period, with simple physicians $\overline{\text{O}}$ *swnw* or *sinw* with their early evidence of existence at the third Dynasty [ca. 2686–2613 BCE] and the first recorded physician Hesy-re (the reign of King Djoser), after that some other titles were attested (documented) such as; *wr swnw* “chief of physicians” (Ghalioungui, 1983), *sHD swnw* “inspector of physicians” (Jones, 2000), *imy-r swnw* “overseer of the physicians” (Ward, 1982), which suggest a separate class in hierarchy among this category of physicians. Another category of physicians is those of the King and the royal palace such as: *swnw nsw* “physician of the king”, $\overline{\text{O}}$ *swnw pr aA* “physician of the great house/palace” *wr swnw nsw* “chief physician of the king”, *wr swnw n nb tAwy* “chief physician of the lord of upper and lower Egypt” *wr swnw pr aA* “chief physician of the palace”, *wr swnw n pr Hmt nsw aA* “chief physician of the house of the King’s Wife” *sHD swnw nsw* “inspector physician of the king” *sHD swnw pr aA* “inspector physician of the palace” in a clear indication to administrative organization between this category of physicians (Ghalioungui, 1983). Moreover, there are a series of medical specialties, such as ophthalmology; the title $\overline{\text{O}}$ *swnw irty pr aA* “eye physician of the palace” is attested in the Old Kingdom c.2687–c.2190 BCE (Jones, 2000). Internal disease is also known from the same period and the title *swnw Xt* “physician of abdomen” is proving that (Hannig, 2006). Other specialties are also existed such as dentistry,

pharmacology and proctology (Ritner, 2001). Surgery and trauma care were taking place also in ancient Egypt, the Edwin Smith surgical papyrus (an ancient Egyptian medical text, it dates back to 1600 BC, named after Edwin Smith he is the first brought this manuscript to light) it covers many surgical procedures and elaborated medical methods to deal with trauma, with a strong indication of the knowledge of ancient Egyptians anatomy (Forshaw, 2016). In addition to human healing, ancient Egyptians knew animal care, the veterinary papyrus of Kahun UC 32,036 dated from the Middle Kingdom [2000 BCE–1650 BCE] refers to the knowledge of ancient Egyptians with animal diseases and the procedure of their healing (Lord, 2011).

The ancient Egyptians confronted many of the maladies. Joyce Tyldesley (1995) got the impression which derived from the decorated scenes of the tombs that; “the Egyptians were a well and strong race that cannot be affected by sickness, this impression is completely incongruent by the medical evidence which points out a population of a wide diversity of debilitating life frightening diseases”. Flooding of the Nile and associated water-borne diseases such as malaria, ailments included physical stresses caused from working effort, high death rate for women giving birth; all of these factors and others produce life expectancy was between 30 (women) and 35 (men), however about one-third of infants never reached adulthood (Time Maps, 2018). Ancient Egyptians overlapped between magic, religion and the influence of supernatural in the events of daily life, especially in getting infected with some diseases. Malign deities and disease–demons were assumed to bring diseases, sickness and disabilities as way of punishment (Lucarelli, 2011). Besides, the Egyptian widely used amulets in order to protect the living and the dead. They also used magical/ritual papyri, reciting incantations within medical texts (or mention of the magic god Heka within reading texts) (Ritner, 1993).

5. Medical treatment

The ancient Egyptians physicians used environmental herbals. This was attested in the different medical papyri e.g. the Edwin Smith, London Medical Papyrus (10059), Papyrus Berlin (3038), papyrus Carlsberg VIII and the Ebers papyrus (the longest medical papyrus which was dated to ca. 1534 BCE – the ninth year of the reign of King Amenhotep I from the New Kingdom c.1569–1076 BCE) and was about treating inflamed wound (Nunn, 1996; Ritner, 2001). Antipyretic property of willow leaves also used to treat various inflammatory disorders; likewise, they used willow bark to alleviate birth pains and reduce fever. Recent research discovered that the leaves, grass and the bark of the willow tree contain salicylic acid (Mackowiak, 2000). The texts and depictions described that ancient Egyptian doctors could stitch up wounds, repair broken bones and amputate infected limbs. The incision was dressed by mixture of raw meat, linen, and swabs soaked with honey (Time Maps, 2018). At the beginning of the Late period and early Ptolemaic period [656 BC–323 BC], the so-called healing statues were appeared. They represent noble/elite men derived from Delta regions. The Egyptian used the mythical texts inscribed on these statues for healing purposes (Price, 2016). The cause of the illness is extremely significant in determining the way of treatment, if the cause of illness is obvious like trauma, they chooses drugs and if there were internal disorders, the range of using magic and amulets in this case will be wider beside the invocations to gods who were considered to be involved in both causing diseases and cure them (Nunn, 1996).

6. Physician, embalmer and magicians

The embalmer *wti* is the one who prepares the mummies to keep the body after death without damage. Some literatures revealed that Egyptian doctors took part in the preparation of mummies to improve their knowledge of anatomy. However, it would be plausible to connect the medical profession and embalmers, it must be re-highlight that descriptions and explanations of the internal organs depended on

Table 1
Different categories of magicians practiced medicine.

<i>wab</i> priests of Sekhmet	a lion-headed goddess of diseases, were in charge of medical care and could help those Sekhmet were punished, these priests were functioned especially as veterinary surgeons (Lord, 2016).
<i>xrp</i> Selket is for a priest	Dealing with medical spells and healing specially bites and stings of snakes and scorpions (Abdou, 2011).
<i>Xry-Hb</i> “lector priest”, <i>sAw</i> “the magician”	The who was usually reading incantations and spells (Nunn, 1996). The who mentioned in the beginning of the papyrus of Ebers with <i>swnw</i> and the priest of the goddess Sekhmet as three healers (Nunn, 1996).
<i>HkAy</i> as a rare word for a “magician”	The who provided the magical protection of children of a local magnate (Nunn, 1996).

comparing the anatomy of human bodies with that of animal bodies as indicated in the most of their ancient texts' information. Nevertheless, the outstanding reputation of the Egyptian physicians and medicine was acquired in the ancient world (Time Maps, 2018). It was a tradition for Near Eastern Kings to demand for the help of Egyptian physicians, many evidences are attested during the New Kingdom [1569 BCE–1076 BCCE] and Late Period [656 BCE–332 BCE]. In the Eighteenth Dynasty, Niqmad King of Ugarit (ancient city in northern Syria, its ruins called now Ras Al-Shamra) asked the Egyptian King Amenhotep IV (Akhenaten) to send him a palace physician (Table 1). At the reign of Rameses II [1279 BCE–1213 BCE], physicians, exorcists and medicines were sent many times to the Hittite King Hattusili (the ancient region of Anatolia / Asia Minor, modern day Turkey). And as Herodotus mentioned in the Late period that: “King Darius I was accustomed to attached to his person the most reputed Egyptian Physicians” (Ghalioungui, 1983). Other fields associated with physician and embalmer such as the pharmacist, bandagers, masseur and even amulet seller who was trained to take the pulse (Ritner, 2001).

7. Where was the nurse?

In fact, all of mentioned activities and others couldn't be achieved by the doctors without aid from assistant titled nurses. The discrepancy between researchers was detected; some evidence mentions that the both genders were nurses who assisted the doctors in procedures (Graves-Brown, 2010; Mark, 2017). However, the other researchers are profoundly interested in ancient Egyptian proved that, female nurse role was limited in caring and breastfeeding of children (wet-nurse) and there were no physician female assistant (nurse) to help the doctors in ancient Egypt, and there is no evidenced texts or sign which shed light on work of such a nurse in relation to medicine (Nunn, 1996). However, there were strong studies which argue that there was male physician assistant who prepares equipment, feeding ill patients, help lay patient, and measure health parameters such as temperatures and pulse. Currently, pulse measurement is one of the basic nursing routines work likely as evidenced ancient Egyptians had knowledge of the circulatory system and they understood the relationship of pulse in health assessment and diagnose illnesses (Barr, 2014).

8. What are the different titles of ancient Egyptian nurse?

There are several Egyptian words for the nurse, but most of these relate to wet-nursing or child care. In hieroglyphs, the sign of a woman seated on a chair with a child on her lap (Gardiner sign-list B 6)  points to a nurse. While a woman suckling a child, it means a wet-nurse (Gardiner sign-list B 5)  (Allen, 2008; Nunn, 1996).

The verb     *srwx* has many meanings concerning the medical care. It is used in medical treatments (ordinary use) to take the sick into treatment, treat pathological; especially sore and swelling and in treating a particular either apparent or internal diseases. And outside the medical sources, the verb means “to take care of the aged” (Erman and Grapow, 1971, vol. IV). However, the rare Egyptian title *xnmt* and/or *xnmt.t* is usually translated as “dry nurse” (Ward, 1982). The first attestation of the title  *xnmt.t* “dry nurse” is in the pyramid texts which are dated by the Old Kingdom [2575 BCE–2150 BCE]. The ones who held this title were goddesses and they were in charge of

providing the deceased king with bread and food (Erman and Grapow, 1971, vol. III). Then the same title was repeated again as   but this time at the coffin texts (CT) (These were inscriptions placed inside the coffins, containing spells and incantations intended to help the deceased on their journeys to the hereafter. The Coffin Texts were developed in the first Intermediate Period [2134 BCE–2040 BCE] and composed of the Pyramid Texts, which had been placed only in royal tombs/ pyramids) (Hannig, 2006; De Buck, 1935). Also, for the first time the male title   *xnm.ti* “male nurse” was attested in the (CT) as a god's child or as priestly title (Hannig, 2006; De Buck, 1935). The (CT) also recorded the title   *xnmt* but as a goddess with a rare appearance in two spells CT VI 673(300 m), CT III 203 (137d) (Hannig, 2006; De Buck, 1935).

The title of *xnmt* has been continued to use during the Greco-Roman Period as an epithet to the goddesses Hathor, Isis and Nephthys: Isis is the nurse of falcon of Gold. The title appears at the temples of Philae and Dendera but is rare outside the religious sphere. The title may be derived from the verb *xnm* “to unite with” referring to the goddess uniting her breast with the mouth of the child or perhaps from the word *xnm* “vessel” and *xnmt* “well” referring to the goddess as a container or well of milk for the child (Wilson, 1997). Another similar title for dry nurse is   *xnmt* (with another spelling) was mentioned on a papyrus named Turin and numbered 54,003 which is dated to the Middle Kingdom (Hannig, 2006).

And due to the lack of non-religious sources, we can say that the world of humans was just a reflection of the underworld and the world of gods. So, the study suggests that there were dry nurses (both male and female) in the daily life held the same titles as gods and maybe in the future another textual or epigraphical sources will be revealed and shed some lights of these titles and their holders (Hannig, 2006).

9. The magnitude, denominations, and high standing level of wet-nurses.

As a result of poor public health and high mortality rate of children the importance of midwives and wet-nurse was augmented to substitute mothers who can't provide care or feed their children. Renenutet   *Rnn.wtt* means the nourisher, food supplier and prosperity goddess, one important aspect of the nurse raises, supplies and manage human life (*rnn*) (Seeber, 1984).

A lot of texts and depictions on temples indicate the role of wet-nurse in this ancient time (Mark, 2017). The first breastfeeding scene was depicted on the walls of the mortuary temple of King Sahure of the Fifth Dynasty at Abusir [2494 BCE–2345 BCE]. The scene shows the goddess Nekhbet (in human form) breast feeding the King Sahure who appears in the form of a young boy (Borchardt, 1913). Many examples of goddesses suckling the King dated by the New Kingdom. One of them is the famous three dimensional sand stone statue at Cairo Museum (JE 38574–5) of the goddess Hathor (in the form of a cow coming out of Delta marshes). The goddess Hathor as a cow is shown protecting the King Tuthmosis III who stands under her chin while she suckles the infant King Amenhotep II (Saleh & Sourouzan, 1987). Another example of Eighteenth Dynasty [1550 BCE–1292 BCE] also is the golden pendant of King Tutankhamun at Cairo Museum (JE 61952). The pendant takes the shape of a deity, Werethekau (human-headed cobra), suckling Tutankhamun (Ouda, 2016). Another famous royal depiction of nursing



Fig. 1. Birth scene of King Amenhotep III at Louxor temple.

and suckling by Gods are shown at the divine birth scenes in the temples of the New Kingdom such as scenes of Queen Hatshepsut at her temple in Deir El Bahari (Naville, 1896), and scenes of Amenhotep III at the chamber of the divine birth in Louxor temple (Gayet, 1894) (Fig. 1). These scenes prove in mythical way the divine kingship. This tradition of royal or divine birth continued during the Late and Greco-Roman period in the so-called Mammisi (a small temple is located near the precinct of the temple of divine triad) (Feucht, 2001).

There are many Egyptian verbs and nouns expressing the meaning of child care, suckling and breast-feeding, such as; the verbs snx , and snxn mean nurse, AT snx , var. snxn is a verb which means to nurse, while the noun was Atyt . Another verbs also used like snq "to suck, suckle or nurse", imH "suckle from breast or udder" which is used for both human and animals. rnnt as a noun means "wet-nurse" (Erman and Grapow, 1971, vol. IV; Faulkner, 1962). The title mnat "wet-nurse or guardian" was a familiar title in ancient Egypt and its first attestation was dated by the Old Kingdom. The word mnat is used for women, also as a title of Kings' nurses, for goddesses and for village names (in the Old Kingdom) and estates names (in the Middle Kingdom) (Erman and Grapow, 1971, vol. II; Lesko, 2004). One of the largest estates in Middle Egypt at Beni Hassan (El-Minya governorate) was called Mnat #wfw and translated as "the city of the nurse of King Khufu" (Gauthier, 1926). The text of the royal birth scene at Hatshepsut's temple (Deir El Bahari) mentions the verb mna as follows: $\text{mna Hmt.s Hna kAw.s}$ "to suckle her majesty and all her Ka (ka is a person's double or one aspect of soul as ancient Egyptians believed)" (Naville, 1896). And as a continuation of the word mnat till the Greco-Roman period, the Mammisi of Dendera temple was called pr-mnat "the house of wet-nurses" (Erman and Grapow, 1971, vol. II).

The male counterpart of mnat is the title mnai or mna "male nurse or tutor" which first attestation in the Middle Kingdom (Erman and Grapow, 1971, vol. II; Faulkner, 1962; Ward, 1982). The title mnat was continued during the Middle Kingdom with some variations such as mnat wrt Sdt nTr "the great nurse who suckles the God = the king", mnat nTr m waaw "tutor of the God in the private chamber", mnat HaAw "children's nurse" (Ward, 1982). Alongside the first attestation of title mnai , the word kAp - which could translate by royal nursery-attested also in the Middle Kingdom textual sources then disappeared by the end of the Eighteenth Dynasty. The kAp was a place in the royal house where the princes and the noble's sons were raised (Erman and Grapow, 1971, vol. V). The honorary title Xrd n kAp "page/child of the kAp " is also known from the Middle Kingdom till the end of the Eighteenth Dynasty and was held by some nobles who raised in the royal house or royal harem. They kept the title throughout their lives to express their old contact with the royal palace (Helck, 1975).

Four important titles were attested at the beginning of the Eighteenth Dynasty (the New Kingdom) mnat nsw "the royal nurse",

mnai nsw "the royal tutor", Sdi/ Sdt nTr "the one who nurtured the God = the king" and $\text{sn/snt mna n nb tAwy}$ "the foster brother/sister of the lord of the two lands", between 40 and 45 persons hold one or more of these titles during the Eighteenth Dynasty (Roehrig, 1990).

10. Social background, working conditions and burden of nursing

The social status of the wet-nurses was determined by the status of whom they serve or breastfeeding. So, if the wet-nurse served a king or a member of a royal family, she would have become a royal wet-nurse and she would have many special privileges such as setting up a huge tomb, carving statues which show the relationship between her and members of the royal family and having funerary equipment. Moreover the relatives of this wet-nurse will have many privileges also. And this will appear in their titles and their connections with the royal family. In ancient Egypt, the wet-nurse was considered to be affiliated to family in high regard especially the royal families and they were selected the wet-nurses who appear high social level. It was not clear how nurses or wet-nurses were chosen, but some pieces of evidences from the early New Kingdom around [1550 BCE] suggested it have to be a blood tie between them and the royal family. Otherwise is mnat nsw or the royal tutor who acted as a teacher and a guardian and was chosen because his ability and experience (Roehrig, 1990).

Egyptologist Carolyn Graves-Brown (2010) wrote: In the New Kingdom, at least, the royal nurse mnat nsw was an important person, being so close to the king. In relation to male, the tombs showed that; women's career and employment are seldom, although of this fact, tomb owners certain a relative role of the female as a nurse provide care for the king. Hatshepsut's nurse, Sit-re , was important enough to be buried near her queen (Ancient Origins, 2015). Also, she has her famous statue Cairo JE 56264) with her queen Hatshepsut (Roehrig, 1996) (Fig. 2). In the ancient Egypt, the wet-nurse was considered to be affiliated to family in high regard especially the royal families as they are shown in private tomb chapels and on Stele with the family. Another anonymous royal nurse dated from the mid-Eighteenth Dynasty around [1420 BCE] (the reign of Tuthmosis III or Amenhotep II regarding to the style of hair and clothes), is shown in a very beautiful statue carrying



Fig. 2. Statue of wet-nurse Sitre.



Fig. 3. Statue of anonymous wet-nurse with four royal children on her lap.

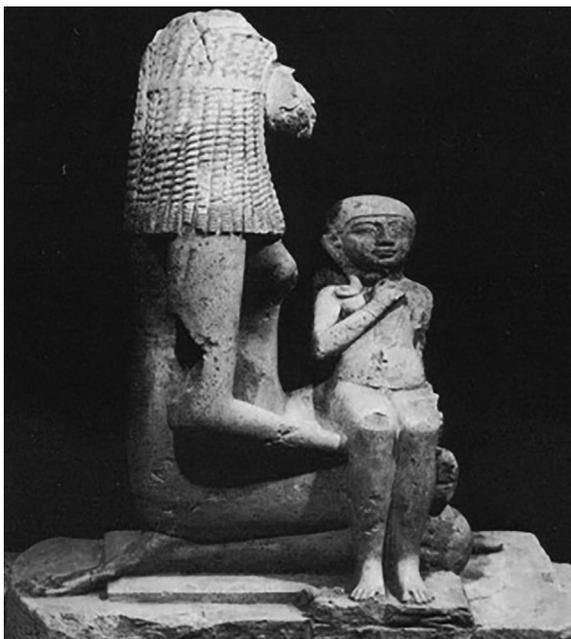


Fig. 4. Statues of a royal Tutankhamun's wet-nurse (Maia).

four royal children (Hawass, 2004) (Fig. 3). The *mnat wrt* “great wet-nurse” Maia of the late Eighteenth Dynasty had an important tomb in Saqqara, and she was the nurse of Tutankhamun (Dijk, 2010) (Fig. 4). Researchers believed that Maia wasn't be a special nurse provide care for young King Tutankhamun, but she was a woman of high status, and his eldest sister Maia (as well-known as Maya, Matia or Meritaten) (Ancient Origins, 2015).

The New Kingdom was not the only era that witnessed royal wet-

nurses, the position continued through the entire Egyptian history (the Third Intermediate period [1069 BCE–664 BCE] and Late Period [656 BCE–332 BCE] also). In 1829 was the discovery of a Theban tomb belonging to *Tjes-Ra-Peret* who carried the title “wet-nurse of Taharqo's daughter”. This tomb was found intact with all the funerary equipment (coffins, two wooden small cases with clay figures, wooden stele and etc.) of the deceased. This proves that socially *Tjes-Ra-Peret* was a prominent figure linked to the royal house of the Twenty-Fifth Dynasty [744 BCE–656 BCE] (Guiddotti, 2008).

However, not the entire wet-nurses were in a high social level. Most of them had been from marginalized families and low socio-economic status and they worked under a certain condition and given pre-definitive wages even if they were slaves, she would be no younger than twenty or older than forty. She would have given birth at least twice, thus being more practiced in rearing children than a novice with her first child. Also, she would have a healthy large body, since it was believed that milk from large bodies was more nourishing. Her breasts however, would be of medium size, since small breasts yielded little milk. It was believed that the children of mothers who have large breasts and, reserved extra milk more than that they actually needed, those children may be spoiled when they suckled this reserved milk (Yee, 2009).

Submitting a legal contract have to be established for the engagement of a wet-nurse, the contract includes all mentioned conditions (Joshel, 1986). In a document (contract) between a father and a wet-nurse was dated to year 233 BCE. The wet-nurse told the father of the child that: “I was brought to your house to serve you as a wet-nurse to your child. I will be obliged in breastfeed him and protect him from any harm and I will stay uninterruptedly in your house the time of breast-feeding for three years i.e. thirty-six months”. Another contract was dated from the year 17 in the reign of Emperor Cesar Titus. The text mentions an agreement between Tapsais and a wet-nurse called Senosiris and her husband Pisechthis for breast-feeding Tapsais's slave girl for two years. The information that text deals with was the age of the wet-nurse Senosiris who was 45 – very strange for a wet-nurse-, the provenance/*Nome* where the wet-nurse and her husband come from and it could be Dakhleh Oasis and finally, the salary of Senosiris which was monthly amount of wheat and oil, yearly clothes, twelve silver Drachmae and two patch-work blankets. (Heilporn & Worp, 2007).

The ideal wet-nurse abstained from sexual intercourse, and lewdness. It was thought that sexual intercourse reduced the affection that the nurse would have toward the child, soured or reduced the milk supply, or even blocked it entirely by encouraging the onset of menstruation and thus making pregnancy possible. Also, drinking wine likewise not allowed, the adverse effects of alcohol could also pass into the milk, making the baby sluggish, and sometimes convulsive. In addition to all these prerequisites, the wet-nurse should be sweet-tempered, affectionate, and responsive to her charge (Fant & Lefkowitz, 2016). In a culture of breast pumps, baby bottles and nipples, refrigeration, Infant formula and a greatly advanced healthcare system, we moderns should have a greater appreciation for the crucial role that wet-nurses played to reduce infant mortality.

In fact, wet-nurse had negative consequences on the woman and her family. Wet-nurses were women exploited for the products of their bodies. As slaves, they were coerced for their milk. As low social economic free women, they employed out their bodies to enhance their inadequate domestic income. In addition, although the presence of a wet-nurse within the family in a freely manner the family can be adversely affected. Under contractual agreement, marital relations between the spouses may be interrupted and their infants could be feed by another mother than their own one. The household suffered physically and monetarily if the wet-nurse defaulted on her contract (Yee, 2009).

11. Midwife nurse

In relation the role of midwifery, it is inconceivable that there were



Fig. 5. Birthing scene, woman assisted by cow headed goddess Hathor, from Temple of Hathor, Dendera, Egypt.

no women who were especially skilled and experienced at assisting with childbirth. The birth-scene was nearly the same in the temples of the new Kingdom and the Mammisi (Fig. 5). In the temple at Luxor, the two different phases of the delivery has been illustrated on the topmost of the western wall of the divine-birth chamber; the first one was called ejection stage in it at the moment of labor and the second stage which was called post-delivery phase in which the newborn is handled and managed by nurse (Töpfer, 2014). In the book of Exodus (1:5) the Pharaoh of Egypt asked the Hebrew midwives Shiphrah and Puah to kill the male children whom they delivered recently without mercy (Nunn, 1996). A late source mentions that midwives received their training at the house of life of the Sais temple (Feucht, 2001). However, there is no Egyptian word for midwife and no medical papyri deal with childbirth except for the papyrus of Westcar (it describes a magical birth by a local woman assisted by four goddesses) (Nunn, 1996). The title of the midwife didn't appear except in Coptic texts (late Egyptian sources) (Crum, 1939). But we can notice in the eighth part of the birth scene in the temple of Deir el-Bahari of Queen Hatshepsut, the goddess Heqet (frog headed woman) was called *smsyt* "the midwife", which is consistent with her role in Westcar papyrus. The goddess Nekhbet was known also as *smsyt* "the midwife" in the Late Period [656 BCE–332 BCE] (Brunner, 1964).

12. Difference between a female nurse and lady physician

It's crucial to mention that, we should differentiate and don't get confused between nurses and lady physician as a woman profession. A lady physician is on record, Peseshet of the Old Kingdom (she was mentioned three times on her son's stela from Giza). And her title was *imy-r swnwt* "Chief woman physicians or lady director of female physicians" (Nunn, 1996).

In fact, nothing indicates the existence of any of the specialties usually practiced by women, gynecology, or pediatrics. Tawe was the only other example of Egyptian lady – physician who lived in the Greco-Roman Period. And one example of a midwife (Iat-rini) of the third century A.D. who was mentioned on papyrus from Oxyrhynchus nome – El-Bahnasa/El-Minya Governorate – (Ghalioungui, 1983). Queen Hatshepsut initiated establishment the schools of medicine and the women was persuaded and encouraged by the Queen Hatshepsut [1479 BCE–1458 BCE] to track and practice medicine. Not only Queen Hatshepsut does that, there is also memorandum of both Queen Tiye [ca.1398 BCE–1338 BCE] and Nefertiti [ca. 1370 BCE–1336 BCE]. Aside from the position of nurse, women in medicine are recorded as midwives and wet-nurses (Watterson, 2013).

13. Conclusion

To sum up, there was a lack of the textual and epigraphical sources that describe or depict a nurse as a profession in ancient Egypt. As a result of a broad diversity of debilitating and life-threatening diseases were hitting ancient Egyptian population; the medical field delivered a competent & qualified practice. Several evidences were detected regarding the role of both nurse gender, some pieces of evidence mentioned; medical activities and others couldn't be achieved by the doctors without aid from assistant we entitled a nurse either male or female. However, other researchers evidenced that female nurse role was limited in caring and breastfeeding of children (wet-nurse) and there were no physician female assistant (nurse), while physicians were helped by male nurses. The wet-nurse appears high social level and high regard in ancient Egypt especially the royal families such as Hatshepsut's nurse (Sit-re) and Tutankhamun's eldest sister (Maia). Most of them had been from marginalized families and low socio-economic status and they worked under a certain, difficult conditions.

This article proved that there were three kinds of physician assistance dry nurse, wet-nurse and midwives and it's quite clear that these three jobs began at the world of gods then humans used the same titles in daily life. So due to insufficient of daily life sources, we can use religious ones such as pyramid texts and coffin texts. We can see also the title *xnmt* has its male counterpart *xnmi*? And translated as dry nurse and their important role in the religious sources was to provide the king or the deceased with bread and food. The same thing for the title *mna't* which translated as wet-nurse and its male counterpart *mna'i* or *mna* which translated as tutor. The role of wet-nurse and tutor became very clear in the time of New Kingdom when they connected with the royal family, the matter which gave those many of privileges. These privileges allow them to leave numerous of monuments and memorials objects which shed some lights on their titles and their role in the royal palace. At last, the title is not certain translated as midwife and the word for midwife is appeared in the late sources, but we can see obviously the depictions of midwives (goddesses actually or priestesses with the mask of goddesses) on the walls of Egyptian temples till the end of Greco-Roman Period and all of that was illustrated during their help in childbirth. We have to appreciate the role that nurses played in antiquity during ancient Egypt, and further researches are needed to shed more light on this role.

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