

## The first known Egyptian physician/dentist: Artefacts in the Museum of La Plata (Argentina)

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**Summary:** In La Plata Museum there are three casts that have representations and inscriptions of Hesyra who lived in times of King Djoser (2686-2613 BC) and correspond to three wooden panels, finely made, found together with others in this official's tomb in Saqqara. In the Cairo Museum, they are currently classified with the reference number CG 1426, CG1427 and CG1428. Hesyra carries the name of head of dentists and physicians in one of the casts (CG 1426) that is located today in the Museum of La Plata. The texts in hieroglyphics accompanying the image record for the first time the existence of medical and dental activities in Ancient Egypt.

**Résumé:** Le musée de La Plata conserve trois moulages portant la trace d'Hesyra, médecin qui vécut sous le règne du pharaon Djoser (2686-2613 av. J.C), sous forme de hiéroglyphes et d'une représentation. Réalisés à partir de trois panneaux de bois sculptés retrouvés dans le complexe funéraire de Saqqarah (référencés CG 1426, CG1427 et CG1428 au musée du Caire), ils donnent à voir des inscriptions qui constituent le plus ancien témoignage d'une activité dans le domaine de la médecine et de l'art dentaire dans l'Égypte ancienne.

The purpose of this paper is to consider the significance and historic value of the Hesyra titles as head of dentists and physicians, including these objects and presenting some hypotheses about the processes and developments linked to them. We intend to investigate the functions of Hesyra as head of dentists and physicians and link these activities with other references in the medical Papyri.

### The panels and the tomb of Hesyra

The original wooden panels were found between the late nineteenth and early twentieth century in Saqqara, a royal necropolis located about 30 km from Cairo. The tomb<sup>1</sup> lies north of the great staggered pyramid of King Djoser.<sup>2</sup> The tomb of Hesyra would have been built during the reign of Djoser but it suffered a series of modifications over time. It has even been considered that it may have taken ten years to construct the wooden panels, the originals of the casts of La Plata museum.<sup>3</sup> The tomb was a *mastaba*, a term that in Arabic means "bank" and which is a sort of truncated pyramidal structure, with a wide rectangular base, 39 by 17 meters. It was decorated, becoming one of the first painted tombs of the Ancient Kingdom. The

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<sup>1</sup> Ref. S2405.

<sup>2</sup> Quibell 1913.

<sup>3</sup> Davis 2003: 39.

reliefs of Hesyra, in fact, are the most beautiful panels so that they have survived from antiquity.<sup>4</sup> The quality of the wooden panels is such that it is made to look like stone. When James Quibell, the British Egyptologist disciple of Flinders Petrie, studied the tomb between 1910 and 1911 he found eleven panels located in the recesses of the Western wall of the South corridor. Each niche should have had a panel, and the construction of a wooden roof was supposed to form a closed section of the panels, forcing the spectator to crouch to see what was represented there.<sup>5,6</sup>

It is not possible to know the original location of each of the wood panels. It should be noted that when the French Egyptologist Auguste Mariette recovered five reliefs from the niche of the South Corridor between 1860 and 1861-among them the originals of the casts of the Museum of La Plata-, he did not leave record of where they were located. One hundred years later, the Scottish Egyptologist Wendy Wood has suggested a tentative location for each panel in a specific niche within the corridor.<sup>7</sup>

### The titles of Hesyra

The casts of Hesyra contain, in addition to the representation of this official at different times of his life, the enumeration of his titles that almost are repeated in each inscription. However, it is only in the cast of the panel, cataloged as CG1426, that the title of head of physicians and dentists is mentioned (Figure 1). Other titles are repeated in the other casts.



Fig. 1 The cast of Hesyra in the Museum of La Plata (panel CG1426)






wr ibH(w) swn(w) (Ssrw)  
Head of physicians and dentists

<sup>4</sup> Wood 1978: 22.

<sup>5</sup> Wood 1978: 10.

<sup>6</sup> Davis 2003: 48.

<sup>7</sup> Wood 1978: 10.

The title is written in an abbreviated way and includes the words:  wr with the sign of the swallow or martin which means "head", "chief" or "the great one",  ibH with the sign of the tusk of elephant (F18 of Gardiner Dictionary) that means tooth and the word *swnw* with the sign of an arrow  that means physician.

The Egyptians used the word *swnw* to say "physician", and also recognized the specialty of dentist/odontologist, as we would say today. Hesyra is the only official who carries the titles in the tombs of the elite in Saqqara during the III dynasty, the main necropolis of the period. In addition, it is the first title referred to in the exercise of medicine in ancient Egypt. This makes him the first doctor identified so far and for that reason he is identified as the "first colleague" in journals of medicine and dentistry.<sup>8</sup>

Only three other individuals were known to hold these titles:<sup>9</sup> (1) Ni-ankh-sekhmet,<sup>10</sup> head of physicians, head of the palace physicians and head of the palace dentists during the reign of Sahure<sup>11</sup>; (2) Khouy, physician of the palace, head of the palace physicians, head of the physicians of the Upper and Lower Egypt, and head of the dentists of the sixth dynasty, reigns of Teti and Pepi I,<sup>12</sup> also from the Old Kingdom; (3) Psametik seneb, head of physicians, head of the palace dentists, and teacher of physicians in the Late Period. It is also possible to recognize different titles<sup>13</sup> associated with physicians.<sup>14</sup> In addition, Hierarchies have been proposed according to the titles.<sup>15</sup>



hkA mHyt  
Heka priest of the Mehit

This title is linked to cultic activities. Nevertheless, the lion goddess Mehit is associated with the scribes and their activities, so that the role of Hesyra is reinforced fulfilling this function.

<sup>8</sup> For example Martínez 2009.

<sup>9</sup> From Ghalioungui 1971:92 and Bardinnet 1990: 229 ss.

<sup>10</sup> Known for his mastaba at Saqqara, D12 de Mariette (1889) and the false door exhibited at the Cairo Museum (CG 1482). Jonckheere 1960: n° 41; Ghalioungui 1983: n° 28, Rice 1999: 139. Urk. I: 38-40.

<sup>11</sup> *Second* ruler of 5th Dynasty.

<sup>12</sup> Quibell 1905-1906: 22 and pl. XVI; Jonckheere 1960: 66-67, n° 69; Ghalioungui 1983: 22, n° 43; von Känel 1984: 165-166.

<sup>13</sup> In 1960 Jonckheere recognized nearly a hundred doctors and dentists of the ancient Egypt. Ghalioungui (1983) then extended it to 129. Nunn 1994.

<sup>14</sup> Nunn 1996.

<sup>15</sup> See for example Bardinnet 1990: 231.



smsw qd-Htp<sup>16</sup>  
Director of the *ked-hetep*

*ked-hetep* was an office of the State administration<sup>17</sup> and we can infer that it was the organization in charge of the provision of materials in Djoser' period.<sup>18</sup>



mAty mnw  
The one who looks at god Min

It has been translated as "the one that sees/contemplates Min",<sup>19</sup> "who contemplates the god Min", "the one who appreciates Min", "who contemplates Min" (Jones 2000: S. 423, n° 1566).<sup>20</sup>



iry-xt nswt  
Who is known to the King

This denotes a direct relationship with the King without establishing a specific function.<sup>21</sup> However, the majority who possessed it, could also have titles associated with the function of scribe.<sup>22</sup> It is a more common title than the others that have Hesyra. Baud emphasizes that the title is not autonomous and is linked to other

<sup>16</sup> From the reign of Djer to the reign of Djoser, the qd-Htp is identified as the agency responsible for the provision of materials. Engel 2013: 30. Helck 1987: 237-238; Piacentini 2002: 61.

<sup>17</sup> Helck 1987: 237.

<sup>18</sup> Helck 1987: 237-238; Engel 2013: 30.

<sup>19</sup> According to el-Shahawy 2005: 69 "who sees Min". Also Kahl *et al.* 1995: 13D, 242.

<sup>20</sup> References in Takács 2007: 113. On the discussion of the title see Fischer 1961: 25-26.

<sup>21</sup> With different opinion Gorre 2009. Helck 1954: 27, Brunner 1974: 55-6, Jones 2000: 327, n° 1206.

<sup>22</sup> Nuzzolo (2010: 299) notes it for the dynasty V. Even in his study, he considered that it was ported by people of no real origin.

titles.<sup>23</sup> On the other hand, it questions the hypothesis of the title in relation to which those who carried it were relatives of the king.<sup>24</sup>




mDhw sSw nswt  
Master of the Royal Scribes

This title has been interpreted as Master of the King's Writings. Baud (2002:196-197) goes beyond this and translates it as a master, quarryman and scribe of the King, and links it with the function of architect of the palace. We found several dignitaries carrying this title in the *mastabas* of Saqqara contemporaries with Hesyra (Murray 1908: XXVI).



wr arf  
Head of the Bags

This is a little-known title. The *Wörterbuch der Ägyptischen Sprache* (I, 182, 2) only refers to it in the *mastaba* of Hesyra.<sup>25</sup> According to Helck, Head of the Bags (transporters) certainly refers to the function in charge of the people who carry gold in bags.<sup>26</sup> We can note that the determinative  (V33 of Gardiner) is similar to a woven linen bag from the Middle Kingdom<sup>27</sup> that contains some type of mineral.



it mnw  
Father of Min

<sup>23</sup> 1999:114.

<sup>24</sup> For a discussion about the title and the different interpretations see Baud 1999: 107-113.

<sup>25</sup> Die Belegstellen I: 33.

<sup>26</sup> 1987: 261.

<sup>27</sup> UC 7423. Available in <http://www.ucl.ac.uk/museums-static/digitalegypt/textil/other.html>

It is an unusual title and is difficult to define its scope. We can assume some sort of priestly function. Kees<sup>28</sup> (1961) shows that the word *it* "father" designates a category of priests but he indicates it for the cults of other gods like Amon, Ptah and Atum and starting from the Middle Kingdom.<sup>29</sup> Furthermore, this author recognizes a series of parental titles associated with the god Min, a priesthood that has Akhmin as its center of worship.<sup>30</sup>



mDH Sna  
Master of the Storehouse

It is difficult to establish what storehouse is referred to in this title. Helck, however raises the titles headed by master were close to the administration of the scribes of the palace.<sup>31</sup>



wr pe  
Chief of Buto

Possibly this title could reveal that Hesyra had some kind of administrative role in this important city (present Tell el-Fara'in) in the area of the Delta.



HAty inw  
Governor of the Tribute<sup>32</sup>

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<sup>28</sup> 1961.

<sup>29</sup> From Baud 1999: 150.

<sup>30</sup> 1999: 140-141.

<sup>31</sup> 1987: 260.

<sup>32</sup> Jones 2000: 495, n<sup>o</sup> 1853.

This concerns the responsibility of Hesyra in relation to the *inw*, a kind of tribute originated from the offerings through the royal funerary temples in the ancient Kingdom. This tribute is distributed by the king to his family, officials and elite.<sup>33</sup> For his part, Redford considered that, in the Old Kingdom, it was a kind of gift tax.<sup>34</sup> Helck associated this title with other title of Hesyra Chief of Bags linked to the transport of the tribute.<sup>35</sup> Only Hesyra carries this title in the third dynasty Saqqara *mastabas*.<sup>36</sup>



wr mDw Smaw  
Head of the Ten of Upper Egypt

This title linked Hesyra to the provincial government, in this case to Upper Egypt, given that ten would correspond to the number of important provinces in that region of Egypt. For the Sixth Dynasty it is known that those bearing this title were powerful provincial administrators who were in charge recruitment for the military campaigns or corvée.



Hm nTr Hrw pe  
Priest of Horus, Buto (Pe)<sup>37</sup>

This is also a priestly title, here associated with the god Horus. From the Fourth Dynasty, this title is associated with the royal funerary cult.<sup>38</sup> According to Baud the cult of a statue representing the founding ruler in the provinces could also be kept by priests and celebrants of this priestly category.<sup>39</sup> These priesthoods of one god are

<sup>33</sup> Bleiberg 1996: 53.

<sup>34</sup> 1986.

<sup>35</sup> 1987: 261.

<sup>36</sup> Murray 1908: xxvii.

<sup>37</sup> Jones 2000: 556, n° 2059.





<sup>38</sup> Lupo 2007: 1214.

<sup>39</sup> 1999: 214.

fairly common and refer almost exclusively to administrators.<sup>40</sup> Again Hesyra is associated with Buto,<sup>41</sup> although in a ritual and symbolic sense.



Hsy-ra  
Hesyra.

Hesyra, is made up of *Ra* , the sun god, and *hesy* , meaning favored, thus "the favored of Ra". It is one of the first times that the term Ra is used to allude to the sun god by writing it with two signs,  *r* and  *a*, and not with the solar disk. It would also be the first mention of god in the name of a person that was not king.<sup>42</sup>

### Hesyra and Imhotep

Contemporary to Hesyra should have been Imhotep, to whom is attributed the creation of the funerary complex of King Djoser. His name means "the one who comes in peace". Imhotep was deified, as protector of the architecture for the future dynasties, although he does not possess any kind of royal affiliation. Despite this, his tomb has not been found and the only archaeological evidence about him is in the base of a statue of Djoser,<sup>43</sup> which includes duties that Imhotep would have carried out throughout his life such as "Chancellor of the King" and "first after the King" (a position from the Fourth Dynasty with the Pharaoh Snefru, known as vizier), tax collector, head of the building works, among others.<sup>44</sup>

<sup>40</sup> Baud 1999: 300.

<sup>41</sup> Due to the mention of Pe in the title of Hesyra, some authors have interpreted that the city was the original place of Horus, Lord of Mesen. See Helck 1954: 32-33, n. 34; 1987: 152 and Kaplony 1963: II, 858-860, n. 992. Taken from Shonkwiler 2014: 338.

<sup>42</sup> Kahl 2007: 29-31.

<sup>43</sup> JE 49889. Dodson 2015: 23 and fig 8. At the north side of the pyramid is the serdab, a small, sealed room that backs against the casing. It contained a singular statue of Djoser.

<sup>44</sup> Malek 2007: 131; Parra Ortiz 2009: 128.



Imhotep has also been considered the first known physician of history, although neither his tomb nor the associated titles have been found. It is likely that his fame comes from his late deification during the Late Period. In an inscription on a statue of the Dynasty it is said about Imhotep: "one who comes to him, who calls him to leave the disease and cure the body" being identified as a physician. We suppose that by having become famous in the Ptolemaic period and having been deified may have led to being recognized as the first physician and as the founding physician of Egyptian medicine.<sup>45</sup> However, as we have already pointed out, it has not been possible to corroborate that Imhotep carried the title of *swnw* and his tomb has not yet been found.<sup>46</sup>

The other references we possess of Imhotep are from literary sources: he is mentioned in the Chester Beatty IV papyrus,<sup>47</sup> as one of the most prominent sages of ancient Egypt, whom people sought to emulate. There are speculations about his authorship of the Edwin Smith Papyrus (found in Luxor) Likewise, through the Canon of Turin we know that Imhotep was not only deified, but also his divine identity is with Ptah, the creator god of Memphite theology.<sup>48</sup>

### Hesyra as head of dentists and physicians

Hesyra is called, in the cast of panel CG 1426, "head of dentists and physicians". But it does not specify what their functions were. It is assumed by indirect references that the so-called *swnw* 'physician' treated external injuries<sup>49</sup> and were trained to perform dental treatment.

However, it is difficult to corroborate Herodotus assertion that: "The practice of medicine is so specialized among them that each physician is a healer of one disease and no more. All the country is full of physicians, some of the eye, some of the teeth, some of what pertains to the belly, and some of internal diseases....".<sup>50</sup>

Important medical discoveries and the writing of the prescriptions of the Ebers papyrus are attributed to Hesyra. He is even associated with some type of diabetes

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<sup>45</sup> Wildung 1977a: b.

<sup>46</sup> About Imhotep and his titles see chapter III of Baud *Djéser et Imhotep* (2002: 71-135) where the author establishes some hypotheses about them.

<sup>47</sup> Whose production context would have been during the Ramesside period, from the nineteenth or twentieth dynasties.

<sup>48</sup> Wildung 1977b: 30-32.

<sup>49</sup> [Ghalioungui 1983](#); [Nunn 1996](#).

<sup>50</sup> II: 84.

treatment, a question that has been mentioned in a general way but not confirmed in the Egyptian Medical Papyrus (Ebers, Kahun, Berlin and Hearst).

Hesyra seems to have obtained the title of head of dentists and medical much earlier. This title does not appear in other panels where he is represented more youthful. In fact, it is in this cast CG 1426 where it appears represented older than in the others. It should be noted that the practice of medicine was closely related to magic, so it is common that those who practiced it were also priests. In ancient societies, there is not a clear-cut separation between what today we would call science and magic. On the other hand, given the position of prestige that they occupied, it was possible that they also have additional titles such as the scribe. This seems to be confirmed in the representation of Hesyra, holding in his left hand the long stick *medw* and short scepter *aba* as symbols of power and nobility;<sup>51</sup> he takes the tools of the scribe<sup>52</sup> over his right shoulder and *drioton*, identified a leather bag, over the left shoulder.<sup>53</sup>

## Conclusions

The importance of Hesyra is attested not only by the titles that he carries but by the wealth and decoration of his grave. The location of the tomb in Saqqara also associates it with the funerary complex of Pharaoh Djoser. In addition, one of the seals of this Pharaoh was found in his tomb. In short, Hesyra was a very important man who was part of the high elite during the reign of Djoser.

According to his titles, he served in institutions containing valuable materials, such as gold or tributes (*inw*). He also performed priestly and cultic functions, linked to gods such as Min and Horus. The latter were probably associated with the medical and dental activities. Unfortunately, we do not know their specific functions, but we can infer that his role as doctor and dentist at the Court of King Djoser was crucial - the first whose title as head of dentists and physicians was documented.

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<sup>51</sup> Fischer 1979: 7 and 18. He points out that in tombs and reliefs of the Old Kingdom, the owner of the Tomb carries that stick and scepter. Also see el-Shahawy 2005: 63.

<sup>52</sup> See Cherpion 1989: 64, 66.

<sup>53</sup> 1942.

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