

The first medical ethics and deontology in Europe as derived from Greek mythology

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Abstract

Medical ethics and deontology are mentioned in Greek myths long before 700 B.C. We collected and present information derived from ancient Greek mythology and related to ancient physicians took care of the sick or injured and how they were rewarded for their services.

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Introduction

Mythology is a valuable tool for the study of medical ethics and deontology in the pre-historic era [1]. Myths mention behaviour and perceptions, that although may have changed or disappeared over the centuries, still reveal the archetypes of a specific civilization [2]. Different narratives for the same hero or for the same incident reveal the interaction between different people and the evolution of a progressive collective social behavior or mentality [3].

Mythology reveals the moral and ethical standards of Greek antiquity in the practice of medicine. In this paper we studied myths that described medical ethics and other papers referring indirectly or directly to the medical ethics of Greek antiquity and tried to relate them to current medical ethics and deontology. These medical ethics may be the origin of medical ethics in Europe.

Mythology on the discovery and transmission of first therapeutic knowledge

The oldest and strongest healing figure in Greek mythology is Hecate (Ekati). She was the great-granddaughter of Gaia (Earth) and sometimes is identified as Selene (Selini), meaning goddess of the moon [4]. After Zeus' victory over the Titans, he acknowledged her power and honored her by naming her "nanny" of the next generations [5]. It is noteworthy that the Greek-speaking and of Greek origin inhabitants of the southern shores of the Black Sea respected this mythological figure even at the early 20th century, before and after they were forced to settle in Greece. These people used to invoke the midnight moon as a healing power for their very sick babies [6]. Moreover, Hecate was known as "the mistress of the underworld", wandering at night with dogs' howls, hence she was also called Scylla, meaning "female dog", or Lupa, meaning "female wolf" [7], two forms that often appear as nannies of abandoned infants in Greek-Roman mythology.

Hecate learned the therapeutic properties of plants by experimenting and testing them first not on local citizens but on foreign people [8]. She taught her therapeutic art to her children, Calypso, Circe (Kirki), Pasiphae and Aetes (Aitis) [9], and Aetes' daughter, Medea (Midia) [10]. Her daughter Circe devoted herself to materia medica and discovered more use of the healing plants [11]. As for Aetes, king of Colchis (Kolhida) he had a herb garden within the limits of his palace, where Medea was the priestess. Medea was called polypharmakos, meaning "the one who owns many medical drugs" [12]. She used her knowledge to help Jason to distract the Golden Fleece and also to escape the rage of her father. It is noteworthy that Apollonius Rhodius describes extensively the preparation by Medea of an ointment for Jason, in the name of Selene under moonlight. He also names the herbs that Medea cultivated in Aetes' garden [13]. The same plants were used, and still are, in folk medicine over the centuries [14]. Medea followed Jason to

Greece from Colchis/Kolchis, became his wife and taught other women to medicine. She was also given the name of Harmonia [15].

Hecate also introduced her medical knowledge to women not from the same blood one of which was Europe, the daughter of Aginor, king of Phoenicia [16]. Phoenicia was a country in the Middle East inhabited by Greeks at that time. The name means "the land with palm trees Phoenices". Hecate also taught medicine to Antiopi, daughter of Aris (the God of war) and wife of Theseus (Thyseas) king of Athens [17], and also to goddess Artemis who taught Iphigenia, the daughter of Agamemnon and his wife Clytemnestra [18], and Callisto [19], and Atalanti, the daughter of lasios [20].

Similarly, Chiron the Centaur appears in mythology as a holder and teacher of therapeutics. He taught Achilles [21], Aristaeus (Aristeos), son of Apollo and Kyrini [22], and Asclepios, also son of Apollo [23]. Asclepios taught medicine to his children, Machaon and Podaleirios, who were the physicians of the Greek army during the Trojan War and treated patients in ancient clinics called after their father's name, Asklepieia. More than 300 Asklepieia well equipped and well organized clinics of medicine functioned in ancient Greece [24].

Extreme treatments

Treatments were not always conservative in Greek mythology, as shown by the use of fire and hot water to achieve regeneration. This is mentioned for the first time when Hecate's partner, Phorcys, achieved to resurrect Hecate herself, after Hercules fatally wounded her, by overheating her body and then inserting it in boiling water [25]. The same practice appears also in other myths. Goddess Demeter of the underworld, responsible for upbringing a child named Dimophon into the living world, attempted to boil this child in order to make him immortal. According to the myth, the child's natural mother stopped the goddess and turned her away. It is believed that the incident was depicted from the occult ritual of the Eleusinian Sacraments or Mysteries, of which very little has been revealed up to now [26].

In the same way, Medea tried to turn her children immortal, but her husband Jason caught her in this act and blamed her as infanticide. Before this incident, Medea used the same method on her father-in-law Aeson and succeeded in turning him immortal. According to the legend, she learned the technique from her father, Aetes, who intended to apply it to his son [27]. Similarly, Dionysus was reborn by Rhea, using the same method, after Titans had killed him [28]. Finally, another legend described that the sun entered a golden boiler every night, to regenerate [29].

Medical ethics and deontology

In all above myths, there is no referral to fees or any other kind of payment or reciprocation. This same tactic of no material reward also appears in the following myths:

Helen of Menelaus offered her therapeutic services to her husband's guests, by adding a calming herb in their wine, as part of her hospitality, without expecting any payment and without even telling them anything [30].

Hercules through his labors offered sanitation services such as: the cleaning of Augea's stables, preventing infection of the surrounding area [31], the killing of the lion of Nemea, which was probably a plague sent by goddess Hecate-Selene [32], the killing of Lerne Hydra [33], whose breath could kill [34], and the bird-chasing away of Stymphalia Lake, which was actually a marsh [35]. Likewise, there was a plague [36] on the sidelines of the meeting of Hercules with Antiopi, queen of the Amazons. The hero offered his help without receiving any actual payment [37]. Perhaps ancient men aimed to receive glory and become heroes in order to be well respected by all Greeks and abroad.

Moreover, Achilles wounded Telephus, ally of the Trojans, in the battlefield, and afterwards he provided him with therapeutic services, although they were enemies [38]. After treatment, Telephus reconciled with the Greeks and returned home, leaving the Trojans. This was a paying back act of gratitude.

Unethical behavior

However, there are some exemptions. Melampus of Argos [39] demanded in advance two thirds of the kingdom of Proetus, king of Argos, in order to cure the daughter of the king of the fury sent by god Dionysus [40]. The king hesitated, but finally agreed to pay.

Eileithyia, the deity of childbirth, responsible for assisting the parturient women, violated her duties and delayed on purpose the labour of Leto, as she was delivering Apollo and Artemis [41], and also the labor of Alcmene, when she was giving birth to Hercules [42]. In both cases, it was goddess Hera who asked Eileithyia to behave so to confined women.

Discussion

According to myths, the first therapists were strictly women. As such, therapy was initially a women responsibility, something that probably reflects the period of matriarchy which was most pronounced in Crete.

The knowledge for the correct use of medicinal plants originated from experimentations on foreigners, non-members of the host society, as in the case of Hecate. Obviously, these experiments could potentially harm human health but Hecate did not want to (possibly) harm her own people. The therapeutic knowledge passed from mother to daughter, to blood relatives and other women of royal birth, as Hecate did. In case that women therapist had no daughters as god-

dess Artemis or Medea, they taught women of noble birth or members of royal families. Accordingly, women therapists were very important and considered as divine or royal figures.

Similarly, in the case of men therapists, they were considered as Apollo's children, for example Asclepius and Aristeos [43]. In more recent periods, divinity was rationalized and considered as a high social class, as in the case of Machaon, (Iliad L, lines 833-4) who when was injured, the other Greeks rushed to help him, saying that "a physician is worthy of many other men" [44].

Concerning the inception of therapeutic education, both Centaur Chiron and Hecate taught young students in medicine. Asclepius taught his own children. The early teaching indicates the difficulty and importance of the healing art, which is also stretched out by Hippocrates [45].

Later, men were responsible for treatment. Women gradually lost their reputation as therapists. This is indicated in Homer's works, where in *Odyssey* Calypso and Circe were called witches [46], and in Euripides' tragedy *Medea*, where Medea is presented to have tried to kill her own children. These cases clearly suggest defamation by the male-dominated regime.

Furthermore, as long as the women were practicing therapeutics, there was no demand for any fee. On the contrary, when men took the responsibility of therapeutics, some of them exploited their knowledge, as Melampus or Aetes, in order to satisfy their personal ambitions or needs. This discloses a completely different usage of therapeutics by men, opposite to that of women.

Misconduct of medical practice is found in Eileithyia's delay to help women in labor, in order to serve the interests of the socially higher goddess Hera. Even though Eileithyia was forced to do so by a goddess, her behavior was unethical, because she chose to comply with Hera's demands than to fulfill her duty. Her case raises the issue of exerting power on therapists. The same situation is found in the case of Polyidus, a therapist threatened to be killed by king Minos, if he did not succeed to heal his son [47]. Similarly, in the case of Asclepius it has been said that he died because Zeus was angry at him for saving human lives [48].

Women who practiced the "boiling" technique, as Medea and even goddess Demeter, were castigated and suffered social exclusion. In contrast, legends about men therapists recount the successful use of herbs for achieving resurrection. The replacement of boiling by the use of herbs indicates the transition to more conservative methods of treatment, which did not cause disapproval or fear.

One of the most important narrations about ethics is the one of Achilles helping his enemy, Telephus. It could be argued that Achilles ought to have helped him, in order to comply with the oracle of Delphi [49], but no one can controvert his personal choice to do so. Therefore the ethics at Achilles' time, approximately 13th-12th century B.C. [50], imposed offering help even to the enemies, in case it was asked for. Consequently Achilles' behavior presents improvement of the moral standards of that time.

In conclusion, the above selected myths provide information about ancient Greek therapeutic "ethos", which is the origin of current medical ethics and may lead to the follow-

ing conclusions:

a) Perhaps women's mentality is more suitable for practicing therapeutics, bearing their maternal instincts and caring behavior. However, women can be also merciless and vengeful. b) Medicine requires a long period of training, perhaps longer than we think, by an expert. The early start of medical education, since childhood, creates a close relationship between the teacher and the student, and a line of succession. c) The high social recognition of medicine and doctors may attract unsuitable individuals to medicine driven by the wrong initiatives. d) People of power and domination can put overwhelming pressure on doctors. e) Treatments can cause fear to patients and their families, therefore doctors should explain, inform and reassure. Extreme and fearful treatments can be replaced by equivalents, to avoid people's fear and repulsion. f) Doctors' duty is to treat anyone asking for help, even «enemies».

In any case, Greek mythology appears to have set the foundations for ethics and deontology in medicine and in Europe; these foundations were later used by the Hippocratic physicians in their effort to serve patients.

Bibliography

- Salustius. *On the Gods and the World-Epitome of Ancient Greek Philosophy and Religion*. Vivliovardia Publisher, Thessaloniki 2005; p.26-7. In Greek.
- Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.25 In Greek. Also, Jung C. G, Kerenyi K. *Einführung in das Wesen der Mythologie*. Iamblichus Publisher, Athens 1989.
- Mann Th. *Freud and the Future*. Gkovostis Publisher, Athens 1936. In Greek.
- Kerenyi, op.cit. note 2, p.47&184.
- Hesiod. *Theogony*. Vivliovardia Publisher, Thessaloniki 2006; p. 48-9. In Greek.
- Papadopoulos S.P. Pontic Folklore. *Archives of Pontus*. 1996-7; 47: 253-310. In Greek.
- Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974, p.48.
- Diodorus Siculus. *The Fourth Book*. Vivliovardia Publisher, Thessaloniki 2005; p.176-77. In Greek.
- Hesiod. *Theogony*. Vivliovardia Publisher, Thessaloniki 2006; p.88.
- Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.185.
- Diodorus Siculus, *The Fourth Book*. Vivliovardia Publisher, Thessaloniki 2005; p.176.
- Pindarus. *Pythia*, 4.8, TLG & Apollonius of Rhodes. *Argonautica*, III, 27-9, TLG.
- Bibi-Papaspyropoulou A. The Presence of Pontus in Ancient Greek Medicine. *Archives of Pontus*. 1988-9; 42: 189-223.
- Rigatos G. *Ancient medicine in our folk tradition*. BETA Publishers, Athens 2007. In Greek.
- Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.287.
- Grande Encyclopédie Larousse- *Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.25, p.161.
- Grande Encyclopédie Larousse- *Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.9, p.424.
- Grande Encyclopédie Larousse- *Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.31, p.9.
- Grande Encyclopédie Larousse- *Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.31, p.254.
- Grande Encyclopédie Larousse- *Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.12, p.29. Also, Roscher W.

- Selene, Teubner, Leipzig 1890; 127-45.
21. Homer. *Iliad*. Agra Publisher. Athens, 2009; p.255.
 22. *Grande Encyclopédie Larousse- Encyclopaedia Britannica*. Publishing Organisation of Papyrus, Attiki 1996; v.11, p.52.
 23. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.158.
 24. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.562.
 25. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.50.
 26. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.223.
 27. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.51.
 28. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.515.
 29. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.515-6.
 30. Homer. *Odyssey*. Translation by D. Maronitis. Institute of Modern Greek Studies Publisher, Thessaloniki 2012; p.56-7.
 31. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.395-7.
 32. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.381-5.
 33. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.385.
 34. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.385-8.
 35. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.393-5.
 36. Diodorus Siculus, *The Fourth Book*. Vivliovardia Publisher, Thessaloniki 2005; p.166.
 37. Diodorus Siculus, *The Fourth Book*. Vivliovardia Publisher, Thessaloniki 2005; p.72-4.
 38. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.575-6.
 39. Bibi-Papaspyropoulou A. Melampus, the Great Healer of Argos. In: *Peloponnesian Proceedings of the Second Conference of Local Studies*, Athens, 1989.
 40. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.534.
 41. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.132.
 42. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.372-3.
 43. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.140-1.
 44. Homer. *Iliad* Agra. Athens, 2009; p.255.
 45. *Hippocrates* by W. H. S. Jones, Harvard University Press, Massachusetts MCMLIX; Vol. II, p.262-4.
 46. Homer. *Odyssey*. Translation by D. Maronitis. Institute of Modern Greek Studies, Thessaloniki 2012; p.76-87 and 147-56.
 47. Apollodorus Mythographus 3.3 in: Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.114.
 48. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.143.
 49. Kerenyi K. *The Mythology of the Greeks*. Estia Publisher, Athens 1974; p.575-6.
 50. Lesky Albin, *Geschichte der Griechischen Literatur*, Kiriakidis Publisher, Thessaloniki 1985; p.50. In Greek.



Skull of ancient man about 2 million years before found in the Turkana basin, northern Kenya.