HISTORY OF MEDICINE

Medical dreams in Graeco-Roman times

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Dreams have fascinated humankind since time immemorial. Dream interpretation was generally based on the assumption that dreams are messages from the gods, and appears in our earliest written texts, from Egypt and Mesopotamia, Semitic texts (including the Old Testament) and Homer's epic poems.[1] In early Greek literature it is already obvious that besides a divine origin, factors like emotions, waking-state thoughts and illness were thought to influence dreams – sceptics such as the early 5th century poet, Pindar, claimed that dreams were often meaningless.[2] However, the Greeks were the first to identify dreams as being of value in medical practice, and in due course this notion developed along two quite separate lines – the divine dreams of the Asclepian healing cult, and medical dreams identified by so-called rational physicians. The nature of these developments and the interplay between them is reviewed in this study.

The Asclepian cult[1,3-5]

The origins of this mystic cult lie hidden in the myths surrounding the God of Healing, Asclepius. In the *Iliad*, Homer depicts him as the 'blameless physician', of divine parentage, and describes him as having learned the art of dream interpretation from Chiron (who subsequently turned into a centaur). When later immortalised, a healing cult developed in his name, probably originally in Tricca, Thessaly but soon centralised in Epidaurus where an Asclepian temple was built in the 6th century BC. During the 5th century the cult became increasingly popular, and temple complexes, Asclepiea, expanded to Athens (by 420 BC), Pergamum, Cos, Lebena, Aegae and eventually to more than 200 other sites. The cult reached Rome in 293 BC, achieved its zenith in the 2nd century AD and disintegrated in the 6th century, partly because of Christian opposition.

The Asclepiea where healing occurred were usually sited in pleasant wooded surroundings with an ample water supply. In addition to a temple dedicated to Asclepius, the complex traditionally included buildings called *abata*, with open pillared walkways where the patients relaxed and slept. Baths, gymnasia and even magnificent open-air theatres (as at Epidaurus) ensured ample recreational facilities. Priests in white clothing (purple at Epidaurus) assisted by so-called sacristans, manned the shrines. There is no definite evidence that physicians took part in proceedings, although it was rumoured that physicians played a role in establishing the facilities at Cos.

For the patients the healing ritual was simple. Admission was free. The patient first cleansed him/herself by way of a thorough washing procedure, made a sacrifice to the God of Healing (this could be quite modest, even a cake or bread) and then proceeded to the temple precinct and *abaton*, dressed in usual clothing. Towards evening he/she lay down on a pallet, and awaited the very personal message of Asclepius. Whether patients were on occasion given soporific or even hallucinatory drugs by the priests is not clear, but this certainly was not standard procedure. When darkness fell the priests commenced with impressive ceremonies, moving quietly through the temple area, visiting altars, statues and other objects, sometimes followed by sacred dogs or serpents. It was claimed that the latter occasionally licked the wounds of patients. When the torches were formally extinguished, the patients entered 'incubation sleep' when the divine message was received in a dream (*enhupnion*) or a trance (*opsis*). Often the god appeared in person, usually as a gentle, bearded elderly person with his characteristic snake-encoiled staff, or in the shape of a comely youth. There was nothing terrifying in the appearance – the god often laughed as he spoke. He either cured directly, by touch or even by way of incisions (which healed before morning), or gave advice, which was then conveyed to the priest (as diviner) in the morning. The healing message was usually simple, and could *inter alia* involve the use of salves, herbs and other medicaments, or advice on diet, exercise, bathing rituals or other physical procedures. If no contact had been made with Asclepius, the incubation sleep could be repeated and a visit to the Asclepiea could on occasion be quite prolonged. Sometimes patients were healed even without a nocturnal meeting with the god. The priests could exercise the prerogative of asking a patient to leave if they considered it indicated. Satisfied patients were expected to leave a votive – a clay or stone image of the bodily part healed, or a written message on clay or stone to record gratitude or therapeutic experiences. Some of these votives have survived as a very real record of Asclepian procedures and cures.

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Healing was seen as a miraculous event. Today it is evident that cures were of multifactorial nature. Certainly much was accomplished by autosuggestion and the workings of faith, but wise use was also made of pragmatic therapy including dietary advice, exercise, baths and mild proven medicaments. The chronic invalid and hypochondriac, Aelius Aristides, gives a vivid account in his *Sacred Tales* of how his life was made tolerable by frequent visits to the Asclepian shrine at Pergamum.[6] In Roman times incubation sleep also occurred in temples of Apollo, Castor and Pollux, Serapis and Isis.[1,6]

Rational physicians

Pre-classical Greek beliefs that dreams were messages from the gods were increasingly questioned during the 6th and 5th centuries BC.[1] In the process alternative explanations were aired regarding how dreams are formed. Followers of different schools of philosophy professed divergent beliefs. The Stoics believed in prognostication through dreams, the soul being in direct contact with gods and chthonic powers, and 'orders of the universe' during sleep. The Epicureans assigned no prophetic relevance to dreams, while the sceptic Empiricists acknowledged that dreams had some diagnostic value for physicians. The Methodists (e.g. the 1st century AD gynaecologist Soranus) rejected all forms of magic, superstition or unnatural phenomena, including divine dreams. The Dogmatists accepted Asclepian miracles. Pythagoras believed in the prophetic nature of dreams and his disciple, the 6th century physician, Alcmaeon, apparently shared this view, as did another early physician, Diogenes of Apollonia.[1,7]

But in the Hippocratic corpus we find the clearest exposition of medical views on dreams, representative of the rational physicians of classical Greece.[1,8] These physicians avoided all forms of magic, superstition or religious intervention in their practice of medicine. They represented the majority of the physicians of the day. With few exceptions their writings were indeed free of mantic considerations. The treatise on dreams, *Regimen IV*,[8] was probably written at the end of the 5th century or beginning of the 4th century BC, and not by Hippocrates himself. It begins by stating briefly that divine dreams foretelling the future to cities or private persons do occur, and are interpreted by those who deal in that art (by implication it excludes physicians). Without any further discussion of divination, the treatise then explains that all other dreams arise when the soul takes over control of the sleeping body, and reacts by way of dream symbols to the thoughts or activities of the day or disturbances within the body. These dream symbols were then interpreted by knowledgeable physicians. Other diviners were as a rule considered incapable of correct interpretation. In what is considered to be the second 'dream book' in Greek literature (after that of Antiphon[7,9]), the

author then proceeds to interpret typical dreams in terms of diagnosis of body pathology, and subsequent treatment of these illnesses, usually caused by either a surfeit or depletion of bodily humours. The treatment, mostly by means of appropriate diet, exercises, rest, purges, emetics and diuretics, was based on the 'rule of opposites', e.g. excess humours were removed, *inter alia* by diuretics, emetics etc., and increased heat was relieved by cooling of the body. Hippocrates also stated that shouting during anxiety dreams results from sudden heating of the brain as a result of humoral imbalance.[1,7]

Plato, a contemporary of Hippocrates, wrote that dreams were an inferior form of perception and originated in a person's rational parts, with the liver playing a crucial role: 'it sees and yearns after it knows not what, it remembers past, discerns present and foresees future'. He believed in prophetic dreams in educated people (quoting true dreams of Socrates), said that internal bodily factors also caused dreams, but considered that bad dreams came to uneducated people.[1] Plato's pupil, Aristotle, had quite an agnostic attitude. He did not believe in divine dreams and although he admitted that some dreams occasionally seemed to come true, he wondered whether this was not by chance rather than predestination. In his view dreams normally arose from images gathered by the soul as a reflection on daily activities. He conceded that miracles could occur occasionally, but this, he said, was part of a wider spectrum of nature and was therefore not unnatural.[1] His successor at the Lyceum in Athens, Theophrastus, wrote that superstitious people consulted dream diviners.[10]

In the Hellenistic period, Herophilus, teacher at the Medical School of Alexandria, unlike Hippocrates but like the Stoics, firmly believed in divine dreams but taught that the soul could also generate prophetic dreams through contact with 'orders of the universe', and natural dreams via psychological, rather than physical, internal stimuli.

Little evidence exists on early Roman attitudes towards divine dreams, but during the last two centuries BC mantic concepts gained popularity through Greek influence.[1,11] Military leaders like Scipio Africanus and Sulla even abused dreams to consolidate their positions by showing that they were in close contact with the gods.[11] Cicero, however, was a sceptic but admitted that physicians could make good use of medical dreams.[1,12] In contrast, Asclepiades, a Methodist physician in the 1st century BC, rejected dreams as indicators of disease.[1] Soranus, also a Methodist, despised all divining practices and taught his midwives to put no faith in superstitions or magical rites.[1,13] Rufus of Ephesus, an Eclectic, was a firm follower of Hippocrates and therefore believed that dreams assisted in the diagnosing of humoral imbalances (*dyscrasiai*) but warned that correct interpretations might not always be achieved.[1] There is no evidence that he accepted dream divination.[10]

However, Galen (2nd century AD) was the outstanding source for medical dream interpretation in the Roman era.[1,14]

He became a physician because of a prophetic dream of his father, and his views were widely accepted for more than a millennium. He professed to be a firm supporter and admirer of Hippocrates but accepted divine dreams and also believed in Asclepian incubation sleep (like most physicians of his time). He therefore taught that dreams originated from daily activities and thoughts, that the soul of the sleeper could react to humoral imbalances, and could also accept messages from the gods. He wrote close on 150 books and commentaries on medical subjects, three of which were on dreams. Galen admitted that dream interpretation was a difficult matter and that correct answers were not always achieved. The physician had to know the patient well before attempting to interpret his dream. He often quoted Hippocrates' *Regimen IV* as a reliable guideline to diagnosis and treatment. In his time perhaps the best-known dream book of antiquity (there were 34 in all), Artemidorus' *Oneirocritica*, appeared in five volumes, and was quoted by Galen.[1,15] Reciprocally Artemidorus exhorted his son who was studying the mantic arts, to acquaint himself thoroughly with medical theory.

The only subsequent physician in antiquity to comment significantly on dreams was Sextus Empiricus, who believed in both divine and natural dreams.[7]

Discussion

Edelstein and Edelstein[4] state that religion and magic were rarely mentioned in the Greek medical treatises of so-called rational physicians of the 5th and 4th centuries BC. But they point out that in reality even the Hippocratic corpus was already contaminated by religious concepts, as manifested by the mention (albeit very brief) of divine dreams in *Regimen IV*.[8] The progressive 'collapse' of a truly rational approach to oneirology is evidenced by Herophilus' acceptance of divine dreams at a time when a philosopher like Aristotle was extremely sceptical of it. The 'deterioration' proceeded to the great Galen who wholeheartedly accepted divine dreams and the Asclepian incubation cult, while otherwise professing the rational Hippocratic approach to medicine. Edelstein and Edelstein[4] therefore conclude that as far as dream interpretation is concerned, true rational medicine as evidenced in the Golden Age of Athens collapsed long before the close of antiquity.[4]

In Classical Greece and Rome there was therefore a fundamental theoretical difference between the health care practised by physicians, and that of the Asclepian healing cult with its so-called miracle cures.[2] There was nevertheless no consistent animosity between the two healing professions, and physicians did not criticise the Asclepian cult in writing. A famous saying by Plutarch went as follows: 'When the physician fails, everybody resorts to incantations and prayers, purifications, amulets and dreams'.[16] This was probably particularly true of chronic diseases; physicians accepted the fact that many chronic conditions could not be cured but did respond to the magical ambience of the Asclepiea. The gradual dilution of strictly rational medicine (mentioned above) with the inclusion of elements of the supernatural would have facilitated greater acceptance of incubation sleep-healing as time went on. Asclepian healing was based largely on acceptance of miracle cures, and it is interesting to note that Aristotle (3rd century BC) postulated that miracles were part of the wider spectrum of nature – very rare, but by his definition not unnatural.[17] This concept could have made Asclepian healing more acceptable to the rational physician. It must also be accepted that therapeutic techniques used by the Asclepian priests were not really very dissimilar to the Hippocratic physician's therapeutic potential.[1]

This brings one to the interesting conclusion that although the approach to health care based on dream interpretation in Graeco-Roman times differed fundamentally between physicians and Asclepian priests, the outcome was conceivably quite comparable. And as long as mutual relationships were friendly, the two systems probably complemented each other in daily life to the benefit of the patient.

1. Oberhelman SM. Dreams in Graeco-Roman medicine. In: Haase W, Temporini H, eds. *Aufstieg und Niedergang der römischen Welt* II.37.1, Berlin: Walter de Gruyter, 1993: 121-156.
2. Pindar. *Pythian Odes*, 9.95-96.
3. Van Straten FT. Daikrates' dream. *Bulletin Antieke Beschaving* 1976; **51:** 1-38.
4. Edelstein EJ, Edelstein L. *Asclepius. Interpretation of the Testimonies*. Vol. II. Baltimore: Johns Hopkins University Press, 1998:1-257.
5. Major R.H. *A History of Medicine*. Vol. I. Springfield: Charles Thomas Publishers, 1954: 103-110.
6. Horstmanshoff HFJ. Uit het 'Nachtboek' van een patient. In: Horstmanshoff HFJ, ed. *Pijn en Balsem, Troost en Smart. Pijnbeleving en Pijnbestrijding in de Oudheid*. Rotterdam: Erasmus, 1994: 85-93.
7. Van Lieshout RGA. *Greeks on Dreams*. Utrecht: HES Publishers, 1980: 8-103, 215-229.
8. Hippocrates. *Regimen IV*: 86-93.
9. Seneca. *Controversiae* 2.1.33.
10. Harris WV. Roman opinions about truthful dreams. *Journal of Roman Studies* 2003; **93:** 18-34.
11. Kragelund P. Dreams, religion and politics in Republican Rome. *Historia* 2001 Band L/1. Wiesbaden: Franz Steiner Verlag, 53-59..
12. Cicero. *On Divination* II. 69,142.
13. Soranus. *Gynecology* I. 2.4.
14. Oberhelman SM. On diagnosis from dreams. *J Hist Med Allied Sci* 1983; **38:** 36-47.
15. Price SRF. The future of dreams: from Freud to Artemidorus. In: Halperim DM, Winkler J, Zeitlin FI, eds. *Before Sexuality: The Construction of Erotic Experiences in the Ancient Greek World*. Princeton: Princeton University Press, 1990: 365-387.
16. Plutarch. *De Facie in Orbe Lunae* 920b.
17. Aristotle. *On the Generation of Animals* IV. 4.770^{a}9-17.