

Medicine in the era of the Old Testament: from the history of hygiene and Biblical practice of healing

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The article is devoted to Old Testament medicine and determination of the value of the history of medicine in the development of modern philosophy of science. The problems of health and healing in the Old Testament era were reflected in the ancient texts of the Bible and the Talmud. An emphasis is placed on the connection between religious instruction and observance of laws relating to the human body, health and attitudes toward disease, elaborated by the entire biblical tradition. The concepts of ritual purity and personal hygiene are discussed in detail, especially health practices in connection with therapeutic agents, which were used by biblical healers.

Keywords: *medical knowledge, regulations, prohibitions, ritual purity, hygiene, punishment, the Bible*

Introduction

The philosophy of science is one of the promising areas of contemporary philosophical thought. The study of the history and philosophy of science becomes relevant in connection with the task of identifying theoretical positions and methodological principles of scientific knowledge specifically related to the establishment of separate scientific disciplines and areas of human activity in a given historical era.

The term "philosophy of science" is widely used in the conceptual constructions of K. Popper, T. Kuhn, R. Carnap and W. V. O. Quine. They demand rigor in reasoning and argumentation as the most important conditions for the formation of the apparatus of scientific philosophy. However, along with this, there is another position that the history of each individual discipline is seen as part of a unified process of learning and the development of scientific knowledge. Such an approach appears to be effective in terms of the formation of the philosophy of science as a part of philosophy in general. Therefore, an appeal to

the history of this or that discipline is connected not only with attempts to expand the horizons of our knowledge by virtue of new information, facts and conditions, but also with the confirmation of the idea that an understanding of the cultural characteristics of a people is made possible by the study of the relationship to a person, who is a traditional representative of the culture [1].

A philosophical view of the history of medicine involves finding the theoretical basis of medical knowledge and identifying its philosophical foundations, while taking into account the environment in which it is systematized. First of all, it concerns taking into account *the historical context* of the formation of medical knowledge, i.e. distinguishing a range of factors – historical, cultural, religious and broad ideological character, which are inevitably included in the problematic field of the history of medicine. [2] An interest in medicine, which is characteristic throughout all ages and all cultural traditions, is largely as a result of the careful attention that a people primarily pay to health problems. At the same time, just as pain is seen as a symptom of disease or is raised to the level of a philosophical concept of the modern theory of consciousness (*painpoints* to the cognitive nature of the subjective experience of consciousness,

making a special class of qualitative experiences), exactly the same illness (sickness or defect) is considered in a narrow or broad sense.

Let us follow this trend with the example of the Biblical history of medicine and try to determine how belief establishes a relationship between a person and the environment, his or her illness and health, as well as how it organizes and regulates his or her life.

Biblical medicine: ritual cleanliness or hygiene?

We can identify the features of the origin and propagation of medical knowledge, as they evolved in the era of the Old Testament, turning first to the Biblical history of hygiene and healing, which together created a special relationship to the culture of physicality, based on an understanding of the dual nature of mankind. [3, p. 24]

Thus, in the world view of the ancient Israelites great value was given to issues of hygiene, which occupies a prominent place in religious law and covers a variety of aspects in the life of this nation. Recommendations, prescriptions and prohibitions, which incorporated oral traditions, and those contained in the Bible, the Talmud and other sources [4-6], were aimed primarily at maintaining physical cleanliness. However, some ideas and concepts (eg, on the importance of cleanliness, mandatory weekly rest, and on infectious diseases) have not lost their relevance today, being many centuries ahead of scientific medical thought and social legislation. These ideas and concepts gradually acquired normative status and can be divided into specific groups: 1) The laws of personal hygiene, cleanliness of the surrounding environment and the laws concerning contact with carriers and sources of disease; 2) dietary laws (kosher); 3) laws on the day of rest.

The kosher laws (the usability of food) are described in detail in the Talmud, and although we do not combine them with the rules of hygiene, some of them correspond to the concepts of nutrition as a condition for health.¹

¹ In some cases, Talmud's food bans were not based on kosher laws, but due to the possibility of putting one's life in danger as a result of food poisoning from poor quality, contaminated or stale food.

The most common of them are moderation in eating, deliberation in eating and regularity in eating.

Hygiene was associated with ancient prescriptions regarding ritual purity and sexual taboos. Although there is no direct relationship between the notions of personal hygiene and the concept of ritual purity, we will try to outline some of their common features.

It should be noted that in the world view of the ancient Israelites particular focus was placed on affirming the ideas of *ritual purity*, which were understood to entail following a set of requirements governing the behavior and lifestyle of people. First of all, it concerned a particular social group of priests, especially the high priest,² whose exclusivity and "sanctity" were stressed with the imposition of specific prohibitions, restrictions and regulations. For example, upon commencing a service, the priest (*kohen*, or "priest of Yahweh" of Aaron) was required to wash hands and feet with a special basin in the courtyard of the temple. He was forbidden from consuming intoxicating beverages while performing his duties (Lev. 10: 9-11; Iskh.44); he was not allowed to touch the body of the deceased (except blood relatives) or perform the rites of mourning for the deceased. In the Pentateuch a number of physical defects are mentioned that preclude him from the right to perform a temple service and make sacrifices – his field of responsibilities, which is inherited, can be precluded in the event that a descendant has a physical deformity or defect.

There were also taboos of a social nature. For example, the priest could only marry a virgin or a widow, unbefitting behavior of a priest's daughter (especially debauchery) was regarded as a serious offense and was punishable by death (Leviticus. 21:7; 9; 21:13).

Non-compliance with these and other regulations, which researchers have attributed to the Priestly Code, would result in *karet* (literally – a "cut" or in a figurative sense "extermination"), i.e. *punishment* directly from

² "They shall be holy unto their God, and not profane the name of their God: for they offered sacrifices to the Lord, the bread of his God, and therefore they shall be holy" (the Old Testament. Leviticus 21: 7).

the Almighty³. And though the Bible says nothing about the methods and types of punishments, the text includes a reference to the 36 punishable sins. Two of them (avoiding circumcision⁴ or the sacrifice of the paschal lamb) involved the avoidance of so-called positive regulations. The rest were connected to non-compliance with specific prohibitions and recommendations. (For example, those prescribing chastity and admonishing against incest and sexual perversions accounted for 15 prohibitions, and the maintenance and protection of monotheism accounted for four prohibitions). A set of rules also perpetuated ritual and ethical standards for human activity. These concerned compliance with the Sabbath day of rest, the ban on using blood in food, fasting, and so on (six prohibitions). Provisions concerning sacrifices stood out in particular (nine prohibitions).

Unlike crimes committed intentionally, the penalty (i.e. the punishment) does not require witnesses (of the offense or crime) and does not involve preemptive warnings. However, according to the Talmud, for those facing punishment, but who confess the sin and accept flogging with a belt, would avoid annihilation (Mack. 3:15).

Over time, despite the fact that the social status of the high priest and the priest remained high and some of their rights and privileges were modified, a number of restrictions remain in force to this day. For example, a priest (kohen) is not allowed to bless the faithful, if he drank wine shortly before the rite or has bodily defects; it is

³ Some scientists believe that punishment was execution by court order. This is what Flavius Josephus and Philo of Alexandria understood the punishment to be. Along with this point of view, posthumous retributions were also considered as possible punishment for sins, i.e. a sinner may not be rewarded with life in the next world. The Bible, by informing of possible sins and banning them, warned people, pointing out that *"everyone who does any of these detestable things – such persons must be cut off from their people."* (Leviticus 18:29). However, some commentators have put forward a version according to which the convicted person is treated in hell according to his or her sins, and for the most serious sins the soul is punished by being deprived of the spiritual delights that were prepared for the righteous.

⁴ Circumcision, which was performed in antiquity with a stone knife, is regarded by many researchers as the oldest surgical operation, although in the Bible this procedure is considered solely in terms of ritual purity.

also forbidden to inspect a corpse and remain close to the deceased or the grave of the deceased (if it is a blood relative they must be at a distance of not less than four meters).

Of course, we can assume that in Biblical times there was special medical guidance. However, we cannot accept the fact that the medical judgments and the character of their beliefs were closely linked. Primarily, this is due to the general attitude that disease and its cure are in the hands of God, and faith in the possibility of miraculous healing perpetrated directly by God or his messenger – a prophet. The understanding of *themselves in the world* as a corporal and suffering being complemented their certainty that the human body (i.e. my body) was a sacred vessel and receptacle of the divine Spirit. [7] Such a world view included the belief that prayer has a healing power, and it was an absolute belief that prayer can cause such a miracle. (Gen. 20: 17-18).

Note that many researchers, including Christians, perceived the effectiveness and the healing power of prayer, quite rationally, noting the almost complete absence in it of any magic spells, characteristic, in particular, of Egyptian and Mesopotamian medicine.

The restoration of specific ideas in the field of medicine – those directly related to the historical period under consideration – from reconstructions of texts of the Bible is difficult due to ambiguous interpretations and possible discrepancies in the texts. That is why some guidelines, which are under discussion, should be interpreted only tentatively. Caution is required when speaking about ancient people's depth of knowledge of the human anatomy, which supposedly they based on their understanding of the complexity of the human body and its anatomical features, such as the anatomical connection between the muscles or flesh and bones, as referred to in the Bible (Genesis. 29:14).

The text of the Bible is replete with words and terms, the use and meaning of which indicate the presence of certain understanding of the internal organs. In this case, the throat or larynx (*garon*), jaw or pharynx (*loa*), heart (*lev*), liver (*kaved*), uterus (*rehem*), stomach (*keve*), intestines, kidneys, etc. [8] A word (Ps. 139: 15) that is close to the modern term "fabric" (*rikta*) occurs. In addition, the Biblical narratives contain

information indicating an understanding of the importance of blood and blood circulation, which are regarded as a necessary condition of human life, as well as breathing, the complete cessation of which leads to death (Gen. 7:22). The writing referred to the connection between the heart and kidneys and of the normal or impaired functioning of the heart (Gen. 45:26). Heart disease lends itself to specific identification due to pain in the region of the heart (Jer. 23: 9), which modern scientists have linked directly with heart attacks (1 Sam. 25: 37-39).

We also find some specific anomalies and diseases that occur in the personages of Old Testament stories. Asa of Judah suffered an illness due to sclerotic vessels of the legs, and the same disease struck the famous King David; Joram suffered gastrointestinal problems. Apparently, leprosy or abscesses were characterized in the Bible as severe skin disease (Isa. 38: 1, 21).

It must be emphasized that the collection of diseases known to the ancient Israelites was formed from words with roots indicating fire and burning. These can be regarded as associative array, close to the feeling of fever felt by the patient and the one who inspects the sick, touching his or her body. Thus, the concept of *inflammation* (daleket) comes from the word "burn" and "fever" (kadahat), from the word "burn."

This kind of associations connected with the names of certain human diseases and illnesses have their roots lying deep in the observed phenomena of nature. So we must pay attention to some parallels in the explanation of the world, choosing the right words and concepts as much as possible to bring them into line with the meaning of the observed processes. So, visually observed changes in the plant world were borrowed and tried on people suffering from skin diseases (*scabs, growths, rashes*). This kind of direct association with the plant world led healers to the belief that these diseases themselves were of vegetable origin. For example, the widespread word "herpes" indicates that which "grows without sowing," and callus or wart has a common root with the word "harvest". The phrase "bloom" is often found in the Bible, but doctors use it when it comes to skin rashes on people.

Identifying certain patterns in the index of diseases that are mentioned in the ancient

sources, we must not forget that the classification of diseases and their names arise from or are often borrowed from Greek or Aramaic, and subsequently obtained their names in Latin.

Special attention should be paid to the Biblical views on the etiology of diseases, which at first glance appear to be exclusively theological. For example, diseases of individual people or large-scale epidemiological outbreaks are described in the Bible as a punishment sent by God for sins committed. So, Miriam, the sister of Moses, was punished by a disease that to modern medicine looks like leprosy, as she spoke evil of her brother (Num. 12: 1-14). A similar explanation is given for the epidemic that struck the people in the desert after a revolt by Korah against Moses and Aaron (Num. 17:10). The notion of ritual purity or ritual impurity when it comes to the outbreaks of disease was explained theologically. However, in all cases, based on the concrete measures taken with the patients, the idea of the danger of infection for both the patient and for all the others was apparent.

Although the infectious nature of some diseases was established only in 1546, and is connected with the name of Girolamo Fracastoro (1478-1553), there was a notion of such diseases already in antiquity. Moreover, infectious disease (any kind) received its own name in the Bible – "bliss" – this word is close in meaning to the word "touch" that can be seen as a direct indication of how infection could occur. Hence the desire to lawfully protect healthy people by separating them from the already infected.

The Bible even mentions special places for isolating these people. For example, in the book of 2 Kings (15:5) it is clearly indicated that Judaic king Uzziah, who was affected by leprosy, was housed in an isolator that was a "single family house" or a building separate from other buildings.

General hygiene held a special place in terms of controlling people's lifestyle, as well as in regulating the methods of management in the case of the spread of various diseases. Hygiene rules held the status of laws, the regulations of which took on a practical nature. Following these practical requirements was considered a condition for the survival of people in the event of an epidemic or spread of infections that were considered the most dangerous (leprosy, plague,

gonorrhoea). There was even a special law on so-called "discharge," which probably referred to gonorrhoea (Lev. 15: 1-13). Recommendations for such patients concerned, first of all, personal hygiene, both of the patient and those who cared for them.

The requirement that personal hygiene be observed was seen as the norm, going beyond exclusively complying with ritual purity. It was no coincidence that according to the law of Moses, not only was a person subject to isolation in the event of illness, but his or her clothes and underwear, bed, and all the items he or she had touched with unwashed hands were considered "unclean." Some items can be "cleaned" after washing with water, while others could not be decontaminated in this way. Apparently, when it came to pottery items, which in Old Testament times were not glazed, they had to be destroyed⁵.

Establishing laws of personal hygiene, along with environmental health in the community, the Pentateuch listed specific human illnesses as impure and even speaks of "ulcers" (as an impurity) on clothes, utensils, uncleanness inside the home and on the items contained within it. "Unclean" items should be cleaned. This requirement was strictly observed even in the case of something or someone that had been declared "unclean" (sick, contagious or violated ritual purity). Therefore, there were special procedures for the purification of the patient's housing, each of the patient's personal items, each household item that came into contact with his or her hands.

Thus, "cleansing" refers primarily to isolating the patient and all things "unclean", which corresponds to the notion of the norm and corresponds to compliance with the law of personal hygiene⁶. In the case of a recovery, the patient's home with its utensils and household items were subjected to purification, as were the people who had come into contact with patient. In general, these practices and the way that life was organized suggested that during the period of

the Old Testament, people knew of cases of the spread of the one and the same disease. Therefore, they developed guidelines aimed at preventing the spread of disease and the preserving health. One of these principles prohibited direct human contact with sources of infection – a requirement that established itself in the people's world outlook many centuries before our era.

The formation of the hygiene principles and the approval of the concept of personal hygiene in the people's world view was greatly influenced by the Talmud, and many of its chapters are devoted directly to the "laws of purity." It should be kept in mind that the special understanding of cleanliness by the people of the Old Testament era is associated with the confidence and the belief that a person is a corporal receptacle of the Divine Spirit, and this makes the task of nurturing cleanliness inspiring. It is no coincidence that the ancient Jews considered bathing the face, hands and feet as a compulsory act of worship of the Creator, establishing this procedure as a definite connection between the purity of the body and the spirit of holiness.

Of course, these actions and their sequence are described in detail (how much water can be used for washing, how to properly wash hands before and after meals, etc.).

Of particular value are the knowledge and rules of the Talmud, which can be characterized as progressive environmental ideas. They are expressed in the provisions concerning the cleanliness of streets (they should be swept daily) and the environment in general. For example, trash dumps, dye houses and cemeteries should be moved outside of the city and located at a considerable distance from people's homes.

Focusing on maintaining purity, understood in both the narrow and broad sense, and all the specific rules governing this aspect of human life, applied to such social groups as scientists. The Talmud stresses the importance of not only cleanliness in general, but severely condemned those scientists who were careless in dress and contemptuous of their shoes. In addition, scientists were also forbidden to live in cities where there were no bathhouses or no doctors. The latter condition created an intellectual atmosphere conducive to medical and scientific activities.

⁵ Hot coffee or tea traders operate in a similar fashion in modern India, pouring drinks in small clay cups that are used only once and then destroyed.

⁶ Unclean, i.e. that which must not be touched, are carrion, corpses, normal or pathological body fluids and other impurities.

Methods of healing and health practices

Characterizing the attitude towards medical work in the epoch of the establishment of Biblical medicine is difficult. First of all, who the first healers were must be determined. The Bible indicates that the role of healers was played by prophets such as Elijah and his disciple Elisha, who became famous as a miracle healer. This ancient text mentions the success of the prophet Isaiah in using a poultice of figs to cure the King Hezekiah of an abscess and tumor. These examples suggest that the status of the doctor was initially viewed as very high and was the equivalent to the status of a priest. However, it should be noted that with the ancient Jews, unlike other peoples (for example, the Greeks), the priests were not engaged in the practice of medicine. They could only examine patients and decide their fate in terms of ritual purity (for example, to determine the fate of the leper), but their activities have never been linked to specific therapeutic recommendations.

In the era of the Second Temple, the high prestige bestowed on doctors was confirmed by such statements as: "Honor a physician and respect him, he will help you in time of need"; "So, if you are sick, my son, pray to God to heal you. And then place your life in the hands of a doctor, for he is from God, and don't leave, until you have been cured" (Ben Sira. Wisdom 28:1)⁷.

Doctors, if necessary, could assist patients or deliver newborns on Saturday and not be considered violating the law. This "relaxation" of the law was due, above all, to a fundamental principle, the force of which exceeded the value of all the others – the principle of saving human life.

The oldest methods of treating diseases and healing mentioned in the Bible were ablutions,

therapeutic bathing, sun and salt baths and the use of medicines (myrrh, sweet cinnamon, senna, nitrates, etc.).

The therapeutic agents used for treatment were mostly of natural and vegetable origin and were highly effective, as indicated, for example, by Flavius Josephus and Philo of Alexandria. They both spoke with great praise of the ability of healers to provide treatment with herbs collected in the desert.

Oil and flavored mixes of different oils occupied a special place in Biblical medicine. They were highly valued and were very expensive. For example, one small glass jar with such an oil could suffice to cover an annual tax bill, which was paid, for example, to King Herod the Great. The full composition of it, unfortunately, has been lost, but modern scholars suggest the possibility that the effectiveness of its effects on the body was close to the action of an aphrodisiac. These natural oils and balms not only had therapeutic properties and were used in performing massages, but the most valuable of them were used as perfumes in exceptional cases.

Treatment methods in Biblical times were often aimed at restoring the body after sustaining injuries and wounds. Dressings were used for wounds and splints were used for the fixation of fractures and pain relief. Specific methods for treating fractures were described. For example, in Exodus (30:21), a fracture of the forearm is described in parable form, as is, in fact, the entire sequence of orthopedic care.

The principle of saving human life as a fundamental practice of the physician and in medicine in general, applied in the attitude towards the handicapped. If a disability or injury was concealed, a marriage with such a person may be dissolved. However, even in Biblical times, the fact that human life took priority above all else was established and even physically deformed newborns were not deprived of life. To raise these children was considered a sacred duty. The reason was the fundamentally different attitude to the individual from that of the Greeks, Spartans and Romans: a person was created in the image and likeness of God, and his or her life should be respected under any circumstances.

Given such stable, humane views, it seems dubious and even contradictory that an infant who was born in the eighth month of pregnancy was

⁷ "Book of the All-Virtuous Wisdom of Joshua ben Sira" is a poetic ethic and didactic essay, part of the Apocrypha. Author Shimon ben Yeshua ben Eliezer ben Sira (in Russian – Jesus the son of Sirach). The essay was written in 170 B.C. In Christian sources, starting from 4 B.C, this work was often attributed to Ecclesiasticus. The book contains sayings, psalms, hymns to God, and didactic poems, which deal with historical events and issues of everyday life; poems praising God, and an alphabetical acrostic about the importance of wisdom. As a religious authority in the early Talmudic era, this book had a value equal to the value of the Proverbs. For more information see: [8, vol. 1, p. 347-349].

seen as inviable⁸, while those born in the seventh month were not. The belief that the female embryo matures later than the male can be attributed to erroneous provisions in Biblical medicine.

There are other interesting facts connected with Biblical medicine. Thus, denying the significance of magic spells and other such activities as attributes of Eastern mystical practices and pagan customs, tradition recognized the benefit of amulets if their healing effects had been previously confirmed three times.

Modern historians of medicine consider the most outstanding achievement of Biblical and especially Talmudic medicine to have taken place in a field that we call pathological anatomy. Its appearance in this early period of history is explained by the laws of kashrut, compliance with which required a detailed study of the internal organs of animals for the presence of anomalies and defects. This was done in order to decide whether or not to use the meat of an animal for food. The combination of these visual observations helped in finding a rational explanation for various factors of an etiological nature, which ultimately led to the conclusion that disease was due to real

changes in the internal organs. Thus, issues of a purely religious nature (in this case, compliance with ritual purity) motivated the search for rational explanations and thus stimulated the development of medical knowledge.

Conclusion

Although written medical guidelines from the period of history under consideration are not available, we have tried to clarify the specific features of the medical knowledge, reflected in the ancient texts of the Bible and the Talmud. Of course, for a detailed study more research is needed, as the Biblical texts can be viewed as a source of a wide variety of data (historical, narrative and religious). Identifying issues related to the field of medical knowledge at the very dawn of scientific thought makes this work not only fascinating but also important for confirming the idea of the evolution of knowledge. Analysis of the issues of Old Testament medicine reveals the people's medical knowledge, which we attribute to the most ancient traditional cultures. Understanding the cultural characteristics of these people is made possible also thanks to the study of the relationship to the individual, and the definition of an individual's place in the traditional value system.

⁸ Caring for them was not allowed to violate the Sabbath.

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