## PARADIGMS

SIMONA GABRIELA
BUNGĂU
VIOREL-CRISTIAN
POPA

# Between Religion and Science Some Aspects Concerning Illness and Healing in Antiquity

"Medicines are a divine gift." (Herophilos)

## Simona Gabriela Bungău

Professor at the Faculty of Medicine and Pharmacy, University of Oradea, Romania.

## **Viorel-Cristian Popa**

Lecturer at the Faculty of Theology, University of Oradea, Romania.

HE HISTORY of pharmacy and medicine is an integral part of the history of science, pertaining, at the same time, to the professional culture of pharmacists and physicians. It includes the relations between numerous pharmaceutical and medical disciplines: on the one hand, pharmaceutical technology, pharmacognosy, pharmaceutical chemistry, pharmacodynamics, toxicology, pharmaceutical management and marketing (for pharmacists) and, on the other hand, anatomy, physiology, pathology, biochemistry and specialized disciplines (for physicians). As a whole, the history of pharmacy and medicine also represents a treasure trove of information about various individuals, works, instruments or remedies that have brought, over the centuries, invaluable contributions to the birth and development of pharmacy and of medicine, respectively, as professions.

The treatment of and the knowledge about diseases, as well as the preparation of remedies, have evolved

in parallel, for, as Swiss Professor Alexander Tschirch stated one century ago, at the beginning of his treatise on *Pharmacognosy*, "Pharmacia soror medicinae est." At the start of the twentieth century, Professor Guignard contended that "pharmacy is also a branch of science, an art and a profession." The history of pharmacy is vast, comprising the following: the history of medical doctrines, of the natural and physical sciences; the history of the pharmaceutical art itself, including the archeological survey instruments that have been used throughout time; the history of pharmacists, regarded as manufacturers and distributors of drugs, healthcare analysts and advisors to patients. What we are actually referring to here is a part of the history of human evolution itself.

For two or three millennia, pharmaceutical work was not differentiated from the medical one, being practiced by one and the same person, who prescribed *and* prepared the medicine—this was an era when the two activities were carried out in tandem. This is the farthest period in time the history of medicine and pharmacy can access, the archaic inscriptions, historical relics and monuments dating back to those times enabling us to discover the origins of these sciences.

From the use of empirical medicine to the complex drugs of our days, to the isolation of their active principles, the determination of their chemical structure and their action at cellular level, the progress of scientific inquiry has been very long and difficult. Notwithstanding the moments of stagnation and decline, the evolution of both pharmacy and the act of healing has always been in the service of humanity.

With the emergence of humans as beings endowed with consciousness, due to compulsory daily concerns, the most important of which were food and defense, what also made its presence felt was the need to treat various pathologies: fractures, cuts, dental afflictions, epidemics (less frequent at first), and so on. The identification of the medical practices used for curing those conditions is particularly difficult, as the only surviving testimonies are the traces they left on skeletons (broken bones, trepanned and scarred skulls, or chronic degenerative and acute infectious rheumatic diseases), attesting to the existence, at the time, of certain orthopedic and surgery concerns.

The early humans considered that illness had either a physical cause (injuries, nutrition, poisoning, physical factors, effort), in which case physical remedies/factors were administered (exposure to cold or warm temperatures, pricking), or a mythical-magical cause (spirits, spells, curses, charms), when incantations, purifications, disenchantments were resorted to, etc. The idea of alleviating such suffering through the administration of a remedy will have occurred to the human who invented the first cure. Early therapy was based on empirical practices, which primarily used healing herbs, the first "medicines"—some of which were very effective—being plant products: emetic, purgative, diuretic, vermicidal, an-

tidiarrheal, abortifacient, antipyretic, diaphoretic drugs, etc. Remedies of animal origin (milk, honey, fat), as well as minerals (salt, clay, mud, mineral and thermal waters), were also used.

In ancient times, the necessity of caring for the sick led to the appearance of healers, who knew the signs of various sufferings and their remedies. It can be assumed that the first physicians appeared out of a survival necessity, their natural observations and conclusions leading to the acquisition of special healing skills. Religious practices also played a role in this respect, and even though they were sometimes carried out on animals, the sacrifices that were performed in temples resulted in the accumulation of solid anatomical knowledge. The very first "pharmacist" in history may have been one of the healers, who would have been entrusted, by his confreres, with the preparation of remedies, either because they were swamped with work or because he was particularly disciplined, patient, skillful and meticulous. Such individuals could be found among the priests from the temples of ancient Egypt. More than 4,000 years ago, the remedy maker was called urmas in their language. His symbol was a man holding a mortar and pestle. Just like the high priests who were contemporaneous with the pharaohs, prior to learning the secrets of this art, the *urmas* was obliged to swear a strict oath, by which he committed to never indulge in wine and women. The word *urmas* is the first term recorded in history with reference to a specialist dealing with the preparation of medicine. The healers—both priests (sorcerers, rhu-iht, those-who-are-skillful) and laymen (medicine men, sunu)—were physicians and pharmacists at the same time, a conclusion that can also be drawn from the hieroglyph for "physician," which comprised three components: a sitting man, a lancet and a pharmaceutical bowl. According to Herodotus, in ancient Egypt the physicians' hierarchy was clear: chief physicians, inspector-physicians and court physicians, each of these categories being specialized in the treatment of a particular disease.

According to a legend, the god Thoth himself dictated to a scribe a lot of information covering numerous domains, which resulted in 42 books known as *The Emerald Tablets of Science*. There are also five major medical papyri, named after the city in which they were found or after their finders: the Ebers Papyrus (a medical-pharmaceutical encyclopedia containing more than 800 prescriptions), the Hearst Papyrus, the Edwin Smith Papyrus, in London and Berlin, as well as others from the New Kingdom period. These prescriptions contained the active principle—the basic ingredient, along with excipients and adjuvants. Herbal remedies were among the most frequently used: sedatives, somnifacients, narcotics (opium, mandrake, henbane, Indian hemp); antiphlogistics (chamomile, mint); aromatics, stomachics (anise, cumin, absinthe, coriander, onion, garlic), diuretics (sea onion), anthelmintics (garlic, pomegranate, drinks with honey and

oil), disinfectants, by way of fumigation (myrrh, terebinth, incense). The forms of administration were extremely various: eye washes, ointments, suppositories, fumigations, inhalations, powders, pills, decoctions, maceration extracts. In addition to those, there were also used constituents of animal origin (milk, eggs, wax, fats, organs, blood, honey) and minerals: sulfur, mercury, gold, silver, copper, sodium carbonate (commonly known as natron and used for the embalming process), sodium chloride, copper sulfate (alum), ammonium salts. All these led Homer to say that "the fertile land of Egypt is the richest in cures." Among the most frequently treated were ocular, respiratory, gynecological and dental afflictions, headaches etc. Despite the well-known conservatism of Egyptian therapeutics, its influences continued to be felt by all the peoples in the Mediterranean basin for a long time after this flourishing civilization died out.<sup>2</sup>

In Mesopotamia, there were sorcerers (*ashipu*), who resorted to magic to treat diseases of supernatural origin, and physicians (asú), who treated natural diseases caused by physical, mechanical or physiological factors through empirical medicine, the Mesopotamian doctors being known as the first practitioners of this profession in the Semitic world. Medical and pharmaceutical knowledge was preserved on clay tablets and "treatises" (assembled clay tablets), which the scribes imprinted with indiscriminately collected information about the art of healing. A tablet of this kind, signed by Nabû-Leû, had three columns that included: plant species—indicating, firstly, the part of the plant that was to be used and the manner of gathering it, secondly, the disease, and thirdly, the cure—the preparation and manner of administration. The oldest Mesopotamian medical text (2100 B.C.), discovered in Nippur, comprised empirical remedies, and the Code of Hammurabi (1760 B.C.) dealt with physicians even though it was a legal code. In the treatment of patients, basic remedies—which acquired the sense of medicine administered to patients—were derived from a lot of plants (sammu), such as: cedar, palm tree, pine, tamarisk, almond, fig tree, saffron, cane, mustard, onion, garlic, sesame, chicory, as well as from other plants with names that hardly have an equivalent in translation (sweet-plant, life-plant, etc.). The pharmaceutical forms consisted of solutions, ointments, powders, suppositories, maceration extracts, fumigations and poultices, which had animal or mineral compounds in their composition (sulfur, alum, metal oxides, and gypsum).<sup>3</sup>

The development of Indian healing practices corresponds to the three different historical periods in the evolution of this society: pre-Vedic (certain drugs are mentioned); Vedic (1600–1500 B.C.), which includes the medical and pharmaceutical knowledge contained in the Vedas (*Rigveda*, or Knowledge of Verses, and *Atharvaveda*, or Knowledge of the Magic Formulas); and Classical.

Most of the notions were permeated by myth and religion, but some were also based on observation—especially those resulting from the examination of the organs of sacrificed animals. Like in other cases, Indian medicine was based primarily on plants—over 700 (asadihi, herbs used as remedies)—administered as powders, fumigations, maceration extracts, tinctures, eye washes, infusions and ointments, which had different effects: tonic, sedative, laxative, revulsive. The very name of medicine derives from this term, ansadhi,<sup>4</sup> and the so-called physicians were divided into two categories: kaviraj, the pilgrim healer, and vaidya, physicians with seven years of medical school. In the treatment of various diseases, products of animal and mineral origin were also used alongside herbs.

Between the 6<sup>th</sup> century B.C. and the 2<sup>nd</sup> century A.D. there appeared several works containing medical notions: *Ayurveda*, *Sushruta-Samhita*, *Charaka Samhita*, *Yoga-Sūtra*. On the whole, medical knowledge was rudimentary, sometimes erroneous, supernatural causes being attributed to various diseases. In ancient India, the grounds of healthcare organization were laid, too, in the form of a sort of hospital establishments, used for humans, but also for animals.

The links between the Asian countries fostered the transmission of medical-pharmaceutical knowledge/works and drug exchanges, the role of India in Asia being compared to that of Greece in Europe.<sup>5</sup>

In ancient China, particularly during the third Royal Dynasty (1066–256 B.C., the Zhou Dynasty), the *Nei Jing* or *The Inner Canon*, a medical-pharmaceutical collection, was completed, as were other encyclopedias; it was during the same period that the character corresponding to the physician (Yi-shen) appeared and that the character Yi, designating medicine, was modified. Numerous treaties on pharmacology/pathology were also written. The first one appeared during the Xia Dynasty and comprised over 360 prescriptions of so-called remedies/drugs, with antipyretic, vomitive, diuretic and sedative effects. Various chemical substances were mentioned, too: sodium sulfate, iron, arsenic, mercury, zinc, saltpeter, cinnabar, carbon black, lead and silver, used as medicine or in various technologies. In his *Description of China*, Nicolae Milescu, a high-ranking Moldavian nobleman, mentioned their medical books and other crafts, their art of healing, which was superior to those in our lands, as well as the herbs, roots and stones they used. Last but not least, mention was made that "in apothecary shops they sell a lot of healing roots, some of which are not found in Europe."

Ancient Greece, one of the most flourishing human civilizations, was a fountain of knowledge in all fields, and medicine and pharmacy were no exception in this regard. Like in the other countries, everything had both a mythological and a real side. The Greeks had two branches of medicine: sacerdotal and secular. They widely used occult practices and plants, and they worshipped Apollo—the god of healing—and his son, Asclepius—the patron of physicians. The temple dedicated to the latter was called *asclepeion*; the patients treated there were recommended various drugs, diets and practices. Note should be made of the influence exerted by the medical "schools" of Kos and Knidos, as well as of the numerous types of people engaged in the art of healing: physicians (*intros*),

those who prepared and sold medicine (pharmakopoles), those who prepared vegetal remedies (*rhizotmos*), those who prepared concoctions/mixtures/poisons (mignatopoles), those who prepared perfumes (myropoles) etc. It was also in Kos that Hippocrates (c. 460–377 B.C.) was born. Known as the father of medicine, he wrote more than 60 works (Corpus Hippocraticum), which are based on manifold views or theses (the humoral thesis, the thesis of the four temperaments, the prognosis thesis) and contain about 300 prescriptions. Well into the Middle Ages, this collection of works remained the foundation of the art of healing. It can be assumed that the physician's activity consisted in identifying the disease based on the symptoms, researching the cause thereof, determining the prognosis and applying the required treatment. The therapy resided in the administration of drugs (hypnotics, uterine stimulants, emetics, purgatives, expectorants, anticonvulsants, stimulants), which were relatively few in treatment, in a diet (the use of honey in mixtures, cereal drinks, unfermented wine), and in the intake of mineral salts. The medicines were administered in the *intreion* or supplied for home use.7

The Hippocratic Oath, sworn even today by all medical graduates, includes both medical and pharmaceutical precepts, as the quintessence of what it means to work in the service of human health. The end of the Greek era, with Theophrastus of Eresos, Diocles of Karystos and others, was particularly rich in works on plants, metals, stones, poisons, deadly drugs, etc.

Hellenistic Alexandria and Rome reached the apogee in terms of the advancement of medicine and pharmacology. Important medical schools developed: the Hippocratic School in Kos, the dogmatic one in Athens, as well as the Methodic, Empiricist and Pneumatist Schools, where notions of anatomy, physiology, pharmacology, botany, pharmacognosy, dietetics, pharmaceutics, surgery, toxicology, etc., were taught. Thus, Herophilos said that "Medicines are a divine gift."

At the beginning, in the Royal Period, the art of healing in ancient Rome experienced strong Etruscan influences and was also marked by the cult of the healing gods: Asclepius, Salus (the goddess of good health), Lucina (the protector of motherhood), Febria (a goddess protecting humans from fever). Gradually, there were accepted Greek physicians trained at the Methodic School—initially, less scientific—(founded by Temison), as were, subsequently, those from the Pneumatist School: Asclepiades—the physician of Mark Antony, Cicero and Crassus; Antony Musa—the physician of Augustus and Horace, who wrote *De herba vettonica*; Philo of Tarsus; Scribonius Largus, who wrote *De Compositione Medicamentorum* and who was Claudius's physician; Andromachus, Nero's physician. The period of intensive development of medical-pharmaceutical concerns was undoubtedly the Imperial period, when the chief physicians (*archiatros*) appeared.

At the end of the 1<sup>st</sup> century A.D., Pedanius Dioscorides of Anazarbus wrote about healing plants and animals in *De materia medica*, a collection of six books describing over 600 plants, recognized until the end of the Renaissance,<sup>9</sup> and in *De veneatis animalibus*.

The father of preparative pharmacy, Galen of Pergamum (A.D. c. 130–c. 201) wrote over 500 works in all areas of medicine—his *Ars Magna* (14 books dedicated to the therapeutic method). He was a surgeon of gladiators and a dietician, classified drugs into nine groups, perfected the so-called Galenic mixtures (pills, ointments, patches, etc.), which, even today, is known as "Galenic pharmacy," developed toxicology thanks to his knowledge regarding the action of antidotes and the removal of poisons, and his influence was huge in the Christian, Jewish and Muslim worlds.

At the time, pharmaceutical practice resorted to instruments that are well known and still used today: pots, mortars, scales, spoons and spatulas, made of different materials: glass, alabaster, wood, metal, ceramics, and also a system of measuring weights. Specifications were made concerning the known toxic substances (poisonous mushrooms, opium, hemlock, mandrake, hellebore, arsenic salts and lead) and their antidotes, as the practice of poisoning was widely used.

On the Dacian territory and, later, in Roman Dacia, the starting point was Thracian medicine, rich in magic and gods with healing powers: thermal and mineral waters, plant remedies, plant and animal poisons. Under the Roman rule, sacerdotal medicine was practiced in temples and the empirical, autochthonous medicine resorted to remedies. The medical, pharmaceutical and cosmetic instruments discovered at Sarmizegetusa, Apulum and Potaissa were almost identical to those found at Pompeii, suggesting the transfer of knowledge to all areas during the Roman conquest. The Zalmoxian School taught medicine, too. A fact which that has been less frequently noted by researchers is that the oath sworn at present by physicians around the world, known as the Hippocratic Oath, is the same oath that was taken by physicians of the Zalmoxian School, albeit in expanded form. The Dacian physicians' rules of conduct were included in the so-called Belagines Laws and can partly be ascertained from the philosopher Plato's account, who had the very famous wise man Socrates relate about the manner in which patients were treated in Dacia.

PRIOR TO administering incantations/drugs to patients, Confession and the Forgiveness of sins, the Healing of the human soul were also mentioned in Christianity.<sup>10</sup>

As a spiritual physician, the priest should know: 1. The patients' diseases of the soul, in general and in particular, that is, their sins, in various forms and occurrences.

2. The sources and causes of sins, for the sources of sins are weaknesses of the flesh, darkening the mind and rebelling the will . . . Once the spiritual (the physician of the spirit) has come to know the disease of the soul, its source and its cause, he should awaken first, in the sick (person), through strong reasoning, the longing for getting healed, for getting better, and then he should make available to him the appropriate means for regaining health and lead him to use these tools and work with the divine means towards regaining health.

These were actually the methods of Zalmoxian physicians, who could be doctors of the soul or of the body, those methods being found later in the Christian world as well.<sup>11</sup>

In the Old Testament, conceptions about illness and healing start from the idea of man's passing through the world, unfolding at the boundary between life and death, health and disease, joy and suffering. Man wants to live a healthy life, to feel alive in his being, to see the outer light as a hope of escaping death. However, summoned by God from non-existence to existence, man often forgets the true meaning of his life, forgets or ignores the voice of conscience, which is the Creator's voice inside him, and thus he violates the Divine Commandments. <sup>12</sup> In an authentic biblical exegesis of the Old Testament, it can be seen that disease, suffering and death are placed in close relation to the original sin of Adam. <sup>13</sup>

According to the Old Testament, the origin of diseases, afflictions, weaknesses, degradation and death, as well as all the evils that affect human nature must be sought in the way the first man managed the exercise of his will, in the wrong way in which he used the gift of free will and in the sin of disobedience to God committed by Adam in the Garden of Eden. The suffering caused by disease and the ensuing death are direct consequences of human disobedience to the Divine (Gen. 2, 16, 17, 3, 1–19). Weaknesses appeared because of the fall of the first man and it was through such weaknesses that physical and mental ailments settled in the body, which cause human suffering and finally bring death unto him (Gen. 3:19). This understanding of illness and suffering is expressed everywhere in the books of the Old Testament.

For instance, in the Biblical Book of 2 Samuel, it is written that a son of David's, born to Bathsheba his wife, the ex-wife of Uriah the Hittite, became ill and died because of the sin committed by David unto that family: "Nevertheless, because by this deed you have utterly scorned the Lord, the child that is born to you shall die" (2 Sam. 12:14).<sup>16</sup>

Thus, sin is reckoned to be the first cause of disease and suffering: the original sin, then the personal sins of each and every one, and the sins of some that have an impact on others, such as the parents' sins, which can have a negative impact on their children. The concept of punishing children for the sins of their parents is quite common in the biblical period of the Old Testament. God Himself refers

to "visiting the iniquity of the fathers upon the children to the third and fourth generation" (Deut. 5:9). Moreover, this concept can also be inferred from the biblical expression "The fathers have eaten sour grapes, and the children's teeth are set on edge" (Jer. 31:29).

The conception of the ancient Jews about the sick was that the human had done something wrong before God, which is why illness and suffering afflicted him. The Book of Job is an edifying didactic poem in this regard. Noteworthy are the "comforting" speeches of Job's friends. They attempted to convince Job that he must have committed a sin before God; that was the sole explanation they could find for the pitiful state of their friend.

The Old Testament presents innumerable situations when disease sets in the human body as a result of sin, in its various aspects. For example, because of his sinful love of money, Gehazi, the prophet Elisha's servant, received the illness of leprosy as punishment: "Therefore the leprosy of Na'aman shall cleave to you and to your descendants forever. So he went out from his presence a leper, as white as snow" (2 Kings 5:27).

Another case was that of King Uzzi'ah. He was also punished with leprosy because he had violated God's Commandment, daring to burn incense in the Lord's Temple, a sacerdotal act reserved only for priests: "Then Uzzi'ah was angry. Now he had a censer in his hand to burn incense, and when he became angry with the priests, leprosy broke out on His forehead, in the presence of the priests in the house of the Lord, by the altar of incense" (2 Chron. 26:19).

Addressing his countrymen, the prophet Isaiah pronounced divine judgment, whereby illness and suffering were the consequences of sin: "Why do you cry out over your hurt? Your pain is incurable. Because your guilt is great, because your sins are flagrant, I have done these things to you" (Jer. 30:15).

From the same Scripture of the Old Testament we find that some diseases are caused by the devil, out of his envy of man (Job 1:6–12; 2:1–5). It should be noted that the devil is not omnipotent. He cannot govern man's actions according to his will; he cannot even touch man's goods or body without God's permission. The Book of Job attests to this: "And the Lord said to Satan, 'Behold, all that he has is in your power; only upon himself do not put forth your hand" (Job 1:12) or, "And the Lord said to Satan, 'Behold, he is in your power; only spare his life.' So Satan went forth from the presence of the Lord, and afflicted Job with loath-some sores from the sole of his foot to the crown of his head" (Job 2:6–7).

In addition to diseases caused by sin or the envy of the devil, God also allows for certain illness and suffering to afflict humans for therapeutic purposes. These diseases are part of the Divine pedagogy plan. The Book of Job tells us that disease and suffering have, as a purpose, the catharsis or purification of the soul:<sup>17</sup> "Behold, God does all these things, twice, three times, with a man, to bring back his soul from the Pit, that he may see the light of life" (Job 33:29–30).

Often, a disease is a test, putting the sufferer in Job's situation. Disease has the capacity to change the relationship of the ailing with the Divinity and his fellow humans, as well as rebuild the human mind, either by casting it into despair or by offering hope and redefining us as human beings. Since suffering is in the immediate proximity of disease or even death, it gives man a new outlook on life, <sup>18</sup> awakening in man the desire to follow the true purpose of life. Suffering reminds us that health and life are not permanent and that the body will gradually waste away, ending in death. <sup>19</sup> Suffering and disease are only forms of the painful and ultimate revelation of the Divinity, a dialogue of tears, with ever fewer words.

Another cause of disease and suffering in the ancient biblical world was the improper care for the body. The Biblical Book of Leviticus provides a host of rules for both ritual lustration and for the intimate hygiene of individual or conjugal life. <sup>20</sup> In this respect, one of the Old Testament books from the category of the Anagignoskomena talks about preventing illness: "Before you speak, learn, and before you fall ill, take care of your health" (Wisdom of Jesus son of Sirach 18:19). It follows that it is not only sin that causes disease, but also neglecting to properly care for the body.

The Old Testament refers to several physical illnesses.

Leprosy: "But when raw flesh appears on him, he shall be unclean. And the priest shall examine the raw flesh, and pronounce him unclean; raw flesh is unclean, for it is leprosy" (Lev. 13:14–15; 2 Sam. 7:3–10; Job 2:7). In the Jewish world, leprosy generally amounted to a dermatological disease, but also referred to molds that appeared on garments or on walls. In the same group of diseases fell leprosy itself, called taarat in the Hebrew language.<sup>21</sup> The disease was considered incurable, which is why lepers were considered dead for society.<sup>22</sup> In the case of leprosy, as well as of all patients with contagious diseases, quarantine was instituted, the isolation of those patients from the community being mandatory. They were taken away from the camp and, later, the city and could not return to their families until they made a full recovery. In the state of isolation, the leper had to wear torn clothes and remain bareheaded. If someone approached him, the leper had to cover his upper lip or moustache and to shout: Unclean! Unclean! It was the sign of the presence of a man suffering from leprosy. What was recommended was the avoidance of contact with the lepers. One can see here an early example of preventive medicine.<sup>23</sup> The state of healing was declared by the priest (Lev. 13).

Boils and blisters: "And it shall become fine dust over all the land of Egypt, and become boils breaking out in sores on man and beast throughout all the land of Egypt" (Exod. 9:9) or, "When a man has on the skin of his body a swelling or an eruption or a spot..." (Lev. 13, 2, 18, 21).

Fever: "I will appoint over you sudden terror, consumption, and fever that waste the eyes and cause life to pine away" (Lev. 26:16; Deut. 28:22).

Dysentery or rotting entrails: "And you yourself will have a severe sickness with a disease of your bowels, until your bowels come out because of the disease, day by day" (2 Chron. 21:15).

Silence: "and he (Lord) had opened my mouth by the time the man came to me in the morning; so my mouth was opened, and I was no longer dumb" (Ezek. 33:22).

Speech impediment: "But Moses said to the Lord, 'Oh, my Lord, I am not eloquent, either here to fore or since thou hast spoken to thy servant; but I am slow of speech and of tongue" (Exod. 4:10; Isa. 35:6).

Blindness: In this case, the Old Testament speaks of progressive blindness caused by aging: "When Isaac was old and his eyes were dim that he could not see it ..." (Gen. 27:1), or "Now the eyes of Israel were dim with age, so that he could not see" (Gen. 48:10; 1 Sam. 4:15; Eccles. 12:3). The Old Testament also speaks of sudden blindness: "And they struck with blindness the men who were at the door of the house, both small and great, so they wearied themselves that groping for the door" (Gen. 19, 11; 2 Sam. 6:18).

Emaciation and damage of bodily organs: "Leah's eyes were weak. . ." (Gen. 29:17; Zech. 11:17).

Disease accompanied by leg pain, probably gout: "In the thirty-ninth year of his reign, Asa was diseased in his feet" (2 Chron. 16:12).

Divine plagues came in the form of epidemics which caused mass deaths. In some cases, reference was made to the plague (Num. 11, 33, 14, 37, 16, 46–47; Gen. 9, 15; 2 Sam. 24, 15; Ezek. 33, 27).

Menstrual disorders: "If a woman has a discharge of blood for many days, not at the time of her impurity, or if she has a discharge beyond the time of her impurity, all the days of the discharge she shall continue in uncleanness; as in the days of her impurity, she shall be unclean" (Lev. 15:25).

Mental and nervous disorders: "Now the Spirit of the Lord departed from Saul, and an evil spirit from the Lord tormented him. And Saul's servants said to him, 'Behold now, an evil spirit from God is tormenting you. And whenever the evil spirit from God was upon Saul, David took the lyre and played it with his hand; so Saul was refreshed, and was well, and the evil spirit departed from him" (1 Sam. 16:14–15, 23; Dan. 4:33). It can be seen that in the Jewish world music therapy was indicated for diseases of the nerves.

Malformations (deformities) in both humans and animals: "Say to Aaron, none of your descendants throughout their generations who had a blemish may approach to offer the bread of his God. For no one who has a blemish shall draw near, a man blind or lame, or one who has a mutilated face or a limb too long, or

a man who has an injured foot or an injured hand, or a hunchback, or a dwarf, or a man with a defect in his sight or an itching disease or scabs or crushed testicles" (Lev. 21, 17–20; Exod. 12, 5).

According to the Old Testament, healing and the relieving of the suffering body and soul could be obtained from the God of Salvation Himself. He was considered the Perfect Doctor. The Old Testament gives many arguments supporting the notion that the Jews were cured by God Almighty the Healer. We can mention a few of these arguments: "I am the Lord, your healer" (Exod. 15:26). In the Book of Deuteronomy, God addresses his people and says, "I wound and I heal ..." (Deut. 32:39; Job 5:17–18). The great King David the Psalmist considered his God a source of forgiveness and healing: "Bless the Lord, o my soul . . . who heals all your diseases" (Ps. 103:1, 3). Because God was considered the Perfect Doctor, patients first resorted to this doctor, by denying all evil and by engaging in prayer. Since sin was considered the main cause of illness, prayers and the return to God were considered the most effective healing remedies.

A good example is that of King Hezekiah, who became seriously ill and, through prayers, implored for divine help when he was in deep suffering (Isa. 38:1–5, 16–17, 20; 2 Kings 20). Judging by King Hezekiah's prayer, the healing of his sickness was the consequence of God's forgiveness of his sins. This is yet another argument that disease was deemed to be an outcome of sin. Also, Hezekiah promised to raise thankful songs in front of the temple. What is presented here is a well-established order that the sick man had to follow in his prayer addressed to the God of all healing: first, he had to ask for the forgiveness of his sins, then he had to entrust himself to God's hands, and finally, he had to thank God for his recovery.<sup>24</sup>

In many cases, as a result of prayer, God healed the man who faithfully and fervently asked Him for this. The idea is outlined in the Book of Prayers: "O Lord my God, to thee I cried for help, and thou hast healed me" (Ps. 30:2). Obeying the words of the Lord and keeping His commandments could be a real cure for health: "My son, be attentive to my words; incline your ear to my sayings. Let them not escape from your sight; Keep them within your heart. They are life to him for who finds them, and healing to all his flesh" (Prov. 4, 20–22). The same thing is stated by Jesus Sirach in his book, "My son, when you are sick do not be negligent, but pray to the Lord, and He will heal you" (Wisdom of Jesus Son of Sirach).

Searching for other healing remedies and putting the divine power in the second place was not well regarded. Mention should be made of a situation where King Asa was suffering, "diseased in his feet, and his disease became severe. Yet even in his disease he did not seek the Lord, but sought help from physicians" (2 Chron. 16:12). King Asa was admonished with those words because, during

his suffering, he did not think first of the healing power of God, but of remedies offered by the people.

Although the cure of diseases was always attributed to the divine power, the physicians' healing interventions were not negligible. Their contributions were considered useful, and the physician, assimilated at the time with the pharmacist, was deemed to be worthy of honor: "Honor the physician with the honor due him, according to your need of him, for the Lord created him. And give the physician his place, for the Lord created him; let him not leave you, for there is need of him. There is a time when success lies in the hands of physicians, for they too will pray to the Lord that he should grant them success in diagnosis and in healing, for the sake of preserving life" (Wisdom of Jesus son of Sirach 38:1, 12–14).

Sometimes, the prophets of the Old Testament appeared, on the Lord's behalf, as healers, but these situations were less frequent. For example, the prophet Elisha was involved in the healing of Naaman, the Syrian leper. At the word of the prophet, Naaman, captain of the King of Syria's army, dipped himself seven times in the Jordan and was cleansed of leprosy (2 Kings 5, 14).

In addition to sacerdotal ministry, priests represented a kind of physicians (not in the sense that they prescribed treatments),<sup>25</sup> but especially when they ascertained the presence of an illness, as well as the recovery from diseases, especially leprosy.<sup>26</sup> Even if they did not treat diseases, priests had knowledge of medicine, obviously, at an empirical level.<sup>27</sup> Priests were not healers. They had to decide the presence or absence of disease. If the priest declared the patient unclean (ill), the latter was forbidden to contact other community members, he was isolated and had to take care of himself.<sup>28</sup> When the priest considered that the healing process had been completed, he allowed the healed to return to his family and community (Lev. 13; 14, 15–18). Chapters 13 and 14 of the Biblical Book of Leviticus represent a genuine treatise on the diagnosis and treatment of leprosy.<sup>29</sup>

The Old Testament mentions several therapeutic remedies, treatments based on natural substances. Even in the Laws of Moses, medical care of the sick or injured is mentioned (Exod. 21:19), which shows that God is not against caring for the sick, and that, since ancient times, various remedies have been used to cure diseases.

According to the Biblical text, Jews resorted to balm for healing purposes. References to this can be found in the prophet Jeremiah's book, where he speaks of the balm of Gilead (Jer. 8, 22, 46, 11; 51:8). We do not know the ingredients that balm was prepared from; the fact is that it had curative properties.

Another cure referred to in the Old Testament is oil. Anointment with oil had been practiced since time immemorial. This treatment was used for patients thanks to its healing properties, especially in case of physical injuries: "From the

sole of the foot Even to the head, There is no soundness in it, but bruises and sores and bleeding wounds; they are not pressed out, or bound up, or softened with oil" (Isa. 1:6; 2 Chron. 28:15). Oil was also used for anointing the lepers who were cleansed of leprosy. Healing was symbolized by pouring oil on the head and lubricating the tip of the right ear, the thumb of the right hand and the big toe of the right foot. This symbolical ritual meant that the priest considered that the cured had been cleansed of leprosy. They could thus become reintegrated into society (Lev. 14:15–18).

The fig cake is presented as having curative properties. At the Lord's command, the prophet Isaiah applied such a treatment for healing King Hezekiah. Although this remedy has healing properties, the suggestion is nonetheless that Hezekiah was healed miraculously by the power of God, following the king's fervent prayers (Isa. 38; 2 Kings 20).

Even in the non-canonical parts, the Biblical text refers to the preparation of healing (therapeutic) ointments: "The skill of the physician lifts up his head, and in the presence of great men he is admired. The Lord created medicines from the earth, and a sensible man will not despise them. By them he heals and takes away pain; the pharmacist makes of them a compound. His works will never be finished; and from him health is upon the face of the earth" (Wisdom of Jesus Son of Sirach 38, 3–4, 7–8). All those remedies had curative properties, but according to the Old Testament, the recognized healing power belonged to God.

F WE were to make a summary of all that has been written, it would become obvious that in Antiquity, the secular and the religious were particularly closely entwined. Whether the studied ancient civilizations relied on priests or healers, under whatever name those entrusted with healing were known, it is undeniable that polytheistic and, later, monotheistic faith played an important role in the curative process. In addition to this, the remedies that were administered were primarily of plant, animal or mineral origin, these diverse cultures resorting, to a greater or lesser extent, to knowledge derived from nature. This knowledge was often transmitted from father to son, but it also circulated between different countries, contributing to the increasing development of the medical, healing process, or to the preparation of ever more complex drugs, serving as avenues with multiple destinations.

The works written during those ancient, incredibly distant times bear the imprint of the flourishing civilizations that produced them, civilizations that were outstanding not only from a cultural, architectural point of view, as regards the buildings and vestiges of inestimable value inherited by mankind, but also because they made possible the appearance of genuine collections of knowledge

about healing, about the manner in which it was perceived and achieved and, last but not least, about those who practiced this occupation.

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#### Abstract

Between Religion and Science:

Some Aspects Concerning Illness and Healing in Antiquity

Being a pharmacist or a physician is not a job, but a profession. Since the emergence of man as an evolved species in the biological chain of life, the need for healing, for finding "cures," for "surgical interventions" has gradually become a prerequisite for survival. Thus, since ancient times, from the very first healer to the apothecary of the Old Testament and, further on in time, to the modern druggist, the notion of pharmacist—as we understand it today—has continuously developed. Moreover, irrespective of whether we speak of the first medicine men, priests, healers, or of physicians, as they are understood today, their purpose has always been that of healing the soul and the body. This study aims to provide as complex as possible an overview of what "healers" meant throughout history, as well as to highlight the secular and religious meanings associated with illness and healing over the course of more than 2,000 years of ancient history.

#### **Keywords**

healing, apothecary, physician, Jewish world, pharmacist, ancient times