THE BYZANTINE PHYSICIANS

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“Orthodox Church remains intangible by extending its arms in the Eastern European territories and preserving an entire art and almost an entire civilization” (N.Iorga)

Abstract: The organization level of the sanitary security shows the unquestionable level of Byzantine medicine. The people from that period believe in healing gods. Cosma and Damian are representatives for the cult of physicians without silver. During this period the charity institutions was developed, and the physicians could study individual or in dedicated schools. The schools activated near hospitals and the candidate who succeeded at the exam, receive a sort of symbol that made the difference between physicians and impostors. The interesting thing is that the doctor accord an important attention to the nutrition, not only to the medical treatment Rich professional libraries were also found in hospitals, and they are endowed with important medical books such as magnificent manuscript which includes the work of Dioscoride, Materia Medica, since 512, wrote for Anicia Juliana. All of these it will be presented to you with all the Byzantine medical personalities’ contributions: Oribas, Alexandru from Trales, Aetius from Amida, Pavel from Egina, Jac Psycristul. In 1453 the Byzantine medicine moved the torch in the young hands of the European medicine fated to lead the medicine further

Key words: Byzantine medicine, physicians, manuscript, Dioscoride.

The Byzantine Empire lasted for over 1100 years and the organization of a functional health care system was undeniable merit of Byzantine medicine.

Pagan healing gods were replaced by the “Saints healers”.

Unmercenary physicians or “Doctors without Silver” cult – Cosma and Damian, with Theraphon, Tecla, Kyr, John, Julian- was established from the very beginning.

According to data transmitted over the centuries, Cosma and Damian were brothers and doctors. They came from Arabia in the town of Cyr. Here they dedicated themselves to patients, both human and animal.

Unlike other doctors, they followed the Biblical advice: “as a gift you received as a gift you give” they did not want to receive any reward. For that reason they were called “Saints Doctors without Silver”- Anargyres.

One day, however, in violation of the decision on which both brothers had agreed, Damian received a sum of money from a noble woman, Palade, who, in the name of Christ, asked him to accept her gift. His brother, Cosma, was so angry that...
he said he does not want to work together with his brother anymore.

After Damian had explained him why he made that gesture, that is not to humiliate and not sad the noble lady who asked the name of Christ, they were reconciled and continued their work.

Governor Lysis, finding that they are Christians and attract many to the Faith, called them into court and asked them to offer sacrifice to the gods of the empire.

As they refused resolutely, they were sentenced to death and executed by decapitation. Their bodies were taken into town by Christians and buried in honor.

In Byzantium, hospitals functioned near monasteries. The administrative head of the entire institution was called the nosocomos. Two doctors and a lot of assistants, who learned, not helped, were working in each section. Women were cared for by a woman doctor, and at night there was a service call.

Two inspectors were visiting the hospital day and night inquiring whether patients are satisfied or have any complaint to make.

Each hospital had a dispensary in which worked two doctors and a number of assistants.

There were specialized hospitals - i.e. hospital doctors in Mangane dealt exclusively with diseases of the digestive tract.

Nurses were instructed on the spot and formed health care professionals’ associations.

Doctors were trained in two ways, individually or in groups i.e. in school. Generally, medical profession was transmitted from father to son.

Medical schools were established around hospitals and one of the doctors acted as a teacher. Students were practicing in hospitals or clinics. Education was free.

Teachers were chosen very carefully and students had to accumulate a lot of experience before start practicing as physicians. This period of training was called kronia.

After the training, the student had to pass proficiency exam and answer question of a maestro, the head of the school or the emperor’s physician, bearing the title of actuarios.

The candidate who passed the examination received as a sign of promotion a medal or badge to distinguish himself from impostors.

Medical practice was based on the theory of the four humors.

In therapy, Byzantine physicians used, along with the old remedies, new exotic ones, made from the three regna.

An important role was played by diet recommendations. There were used curative and preventive diets, but there were also exaggeration. Doctors used to recommend to their patients diets according to different seasons, months, professions or social class.

In order to master these diets and astrological data, doctors had to read a lot and collect many books. So, they had copies of classical medicine textbooks and many copybooks of diets and complicate recipes.

Hospitals sheltered vast libraries with valuable medical works. Till the 15th century, there was in Sarb King’s hospital in Prodrom a magnificent manuscript of Dioscoride’s work “Materia Medica”. It was written for the princess Anicia Juliana, daughter of the Roman emperor Olybrius. Nowadays, this manuscript is kept in Vienna.

A copy of Dioscoride’s famous pharmaceutical textbook, written in the first century A.C., was made in 512 and it is now sheltered in the National Library in Vienna. This manuscript was made for the Byzantine princess Juliana Anicia, Gallea Placida’s great grand daughter and Areobindus wife. The portraits of the author talking to Heuresis (the Gift of
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discovery) and Epinola (Attention), groups of physicians and different plants’ drawings are closed imitations of ancient copies of the textbook, which were in a pure Roman-Greek tradition. The use of gold was, however, a Byzantine innovation.

Only the damaged thumbnail portrait of Juliana Anicia can be considered a genuine work of the 6th century painter. The princess, dressed up in a splendid heavy plated dress, according to her status, looks forward and has a solemn attitude, as aulic ceremonies imposed. She is surrounded by allegories of Intelligence, at her left, and Kindness, at her right. The last keeps gold coins in her lap that Juliana Anicia spreads on the book handled by a little genius, called “the passion of the one who loves to build”. She imitated the generosity acts made by consuls at their appointments.

The whole composition remembers the consular ivory diptychs or the pictures of the Virgin surrounded by angels, as in an icon from the Mount Sinai. At the princess’s feet stays a woman, “the Arts’ Gratitude”, who kisses the princess’s right shoe. In the corners there are theme scenes, in gray “grisaille” tones, painted in a free Greek style, which evoke the generosity of the princess who build up or renovate many churches in Constantinople, winged genius, comparable to those in Pompey, who dealt with architecture and painting works.

ORIBASIUS (329-403)

No doubt, one of the famous Byzantine physicians was Oribasius, born in Pergamos, as Galenus, and received medical training under supervision of Zenon from Cyprus. He was the physician and friend of Flavius Claudius Julian, the Renegade.

Julian the Renegade, appointed Cesar by Constantine when he was sent to Galls, asked Oribasius to follow him. Also, he ordered Oribasius to edit Galenus’ works in a short form.

In 362, Julian succeeded Constantine on the throne, and his physician became Quaestor of Constantinople. Unfortunately, Emperor Julian was killed in 363; Oribasius lost his protection and was exiled between Goths. His exile ended before 369.

ORIBASIUS’s medical works

His first work, written for Julian and called “Galenus’s Synopsis” is lost.

At the Emperor’s request, a Medical books collection was created. It contained 70 books, but only 25 resisted through ages.

He wrote another Synopsis in his old ages for his son Eustatios, who was also a doctor. He also wrote Euporistes, with his recommendations for travelers. In this book, he described symptoms for each disease; presented the main drugs and most common substances used for drug’s manufacture and their effects.

Books 11 to 13 were dedicated to Dioscoride’s Materia Medica exposition and books 14 to 16 described simple and complex remedies. Information was varied, rich and accurate, but his prudence in prescribing needs the reader’s full attention.

Oribasius described for the first time the melancholy delirium, lycanthropy. He prescribed hot oil instillation for earaches; for poisoning he recommended a mix of oil with water in large quantities, then teriac in wine or juniper fruits and 20 rut fruits. He used pharmaceutical forms like trochiscusurile pills and purgatives bread (cathartics) and “Buccellata cathartici” (purgative electuary).

Oribasius presented Caryophyllus
aromaticus as medicine for the first time.

Through its research and knowledge of medical and pharmaceutical literature, Oribasius remains one of the leading authors and practitioners of the Byzantine Empire.

ALEXANDER OF TRALES (525-605)

The greatest physician from the times of Galen until the Renaissance was probably Alexander of Trales.

His work, 12 medical books, inspired medical schools in the Middle Ages, even if he criticized some opinions of Hippocrates and Galenus.

He studied medicine, in private, at Ephesus, Pergamus, Athens and, certainly, in Alexandria. After he finished studies, he arrived in Constantinople, where his brother Antemios, a well known engineer and mathematician, together with Isidor of Milet, was building famous church of Saint Sofia.

He inspired from Hipocrates’s work, who considered that the first mission of a doctor was to ease the illness by all the means.

He was cautious regarding the treatment of cerebral disorders with white hellebore, which could induce fainting, and he was against the use of opium drugs in patients with tuberculosis.

He described remedies like: Mala punica, ether oils, of chamomile decoction, coriander seeds, pomegranate, and castor oil as treatment for intestinal worms, colchium autumnale as gout treatment. He was against opium abuse. In his work, he focused on eye drops. He described very well pleurisy and its treatment, he focused on digestive diseases, gout, ascites and made first differential diagnosis between edema and hypertrophy using thumb pressure, diagnosed intestinal worms and recommended powerful remedies for this disease.

“He is not a compiler, but a practitioner who knew how less valuable wors are at a patient bed”, said P.Brunet about Alexandre, whom work he has translated into French.

Alexander also recommended the use of Ka-Ra-aa formula and amulets, but only if the treatment was unsuccessful.

PAUL from EGINA (626-690)

Alumni of Alexandria’s Medical School, Paul was well-known as a great surgeon who practice nasal polyps’ extraction, catheterize of the bladder, tracheotomy. He was the one who gave the name of cancer – Karkinos, crab – to malignant tumors, because he differentiated them from the benign ones and discover that malignant tumors send branches as a crab’s pincers in the surrounding tissues. He treated breast cancers by excision, not by cauterization.

Paul from Aegina used rectal and vaginal speculum. In his days, medical art had no essential progress, but based on the known techniques it was improving.

He thought of the use of catheter to treat liver abscess and he described correctly the technique of lithotomy.

He remains in the history as an expert in lymph nodes surgery, superficial tumors surgery, uterine and breast tumors removal.

Only Abreviar medical, a 7 volume textbook wrote by Paul lasted till our days.

Books V and VII are dedicated more to pharmacology and describe venomous animal bites remedies, poison, antidotes, simple and complex medicines and their methods of fabrication. Book VI covers surgery issues and Book VII describes terrible plague epidemics.

“… even if they have poor knowledge, surgeons’ technical abilities were so advanced that allowed them to have
important success in delicate and difficult interventions”, said Castiglioni about the surgeons of that period.

**AETIUS OF AMIDA (502-575)**

He was born in Mesopotamia and was trained in Alexandria. He became physician at imperial court of emperor Justinian. It is said that Aetius was the first Greek physician who embraced Christianity.

He knew very well the Asian remedies.

He wrote a medical synthetic textbook with medical recipes and mineral, vegetal and animal remedies. He was the first doctor who used camphor and cloves in therapy.

His most important work is called Tetribiblion and contains 16 books. It is Aetius’ worth to a better knowledge of surgical skills of Rufus of Ephesus and Leonidas, as well as of obstetrics and gynecological skills of Soran and Philumenos.

The best Aetius’s clinical descriptions were his observations on the diphtheria with suffocation, palate paralysis and regurgitation through the nose. He made the first description of brachial artery’s ligature in case of aneurism. He was interested in intestinal worm infestation. Aetius used to recommend prayers in preparation of ointments and emplastres.

**SIMION SETH (SEC. XI)**

Simion Seth is the author of an encyclopedia of material medica – an alphabetical presentation of food beneficial effects. It contains an important number of remedies.

Musk, amber and hashish are presented in his work from Arabian books. He noticed the camphor’s sedation effect on genitor-urinary tract. He presented the ointments and syrup from Arabian recipes.

**MIHAIL PSELLOS (1018-c.1078)**

Mihail Psellos, philosopher, historian, politician, naturalist physician, professor at the „High School” of Constantinopol. He wrote about „the action of the jinns (demons) in the diseases appearance” and the medicamentary effect of the jewels.

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**NICOLAUS ALEXANDRINOS (Sec. XIII)**

Nicolaus Alexandrinos was known as Myrepsos – “The one who makes ointmens”.

He wrote Dynameron, divided in 48 chapters, an important work containing 2656 drug formulations, as well as an important number of other pharmaceuticals remedies, based on their action.

He was inspired by salarniteanian physician Nicolaus Salernitanus’s work Antidodarium. His work contains materia medica and pharmacology with therapy applications. His work had been the Paris Medical School’s Codex till 1651.

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