Byzantine Medicine

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THESIS:

Byzantine medicine was primitive and had no relation to today’s medicinal practices. Healing was based solely on prayer, witch doctors, and magic.

PRIMARY & SECONDARY SOURCES:


Duffy, John. Byzantine Medicine in the Sixth and Seventh Centuries: Aspects of Teaching and Practice. 1984


LIMITATIONS OF STUDY:

- Time
- Lack of detailed information
- Repetitive information
- Up to date information

DOCUMENTS AND ILLUSTRATIONS:

Byzantine medicine was highly known to be based on knowledge from the Ancient Greek and the Romans. It was noted that there was a scientific breakthrough in this time as the Byzantine physicians began to document and illustrate their findings, and what went wrong and what was proven to work better than before. “Byzantine physicians often compiled and standardized medical knowledge into textbooks. These books tended to be elaborately decorated with many fine illustrations, highlighting the particular ailment. The Medical Compendium in Seven Books, written by the leading physician Paul of Aegina, is of particular importance. The compendium was written in the late seventh century and remained in use as a standard textbook for 800 years.”

Byzantine physicians were noted to have made changes in readings and documents written by “the fathers of Medicine” and demonstrated their own new found knowledge in their own textbooks. These documents were first written in Latin and then translated to English and then French. “Byzantine medicine is extremely important both in terms of new discoveries made in that period (at a time when Western Europe was in turmoil), the careful protecting of Ancient Greek and Roman knowledge through compendiums as well as the revision of it and finally, the effect it had in transferring knowledge to both Renaissance Italy and Arabia.”

In these documents of medicine there were many intriguing illustrations that demonstrated the acts of healing. Throughout the years, these documents began so ragged and old that there was an act to “clean them up” and artists were hired to make new and up to date drawings.

1 [HTTP://EN.WIKIPEDIA.ORG/WIKI/BYZANTINE_MEDICINE](http://en.wikipedia.org/wiki/Byzantine_medicine)
Below: Early readings written by Byzantine Physicians are still available today. “A Byzantine Encyclopaedia on Horse Medicine” has been revived and gives examples on early findings of Veterinarians healings, magic and information about horses through the eyes of the Byzantines.

Dioskorides of Anazarbos, a physician and pharmacologist, wrote the *Materia medica* in the first century of our era, probably around A.D. 65. The text is essentially a herbal and lists hundreds of plants along with their medicinal uses. (Doaks) This text lists all the herbs that were used for medicinal purposes in alphabetical order and their pictures. The problem with this over the years was that the appearance and colours of the plants changed and when looking to this book for answers physicians may have confused some plants with others due to their changes.

Left: This Byzantine manuscript is illustrated with techniques and divisions of uroscopy. Seated at top left is Theophilus, a famous seventh century Greek whose treatise On Urines was much used throughout the Greek East and the Latin West (in translation). Handing Theophilos a urine flask is his assistant, Bosos, according to the Greek caption above.

Left: The frontispiece of the Vienna Dioscurides shows a set of seven famous pharmacologists. The most prominent man in the picture is Galen, who sits on a folding chair.
RELIGIONS ROLE:

Just like we see today, the Byzantines relied on prayer, churches and priests to help heal disease, plague, and medical wonders. In Byzantium, many hospitals were built and maintained by bishops and also built near churches to have the presence of God nearby. Physicians at this time told their patients to pray as a last resort when the medicine failed on its purpose.

“Christianity also played a key role in propagating the idea of charity, medicine was made, according to Gary Ferngren, accessible to all and... simple. This idea, combined with the vast resources Byzantine physicians had at their disposal, was one of the first times in history that a state has actively sought to expend resources on a public healthcare system.”

TEACHING:

In the schools of theology there were also students of medicine. However during the early study of medicine, medicine was viewed upon in a negative manner and the theology students were forbidden to reside or affiliate themselves with students of medicine. It was believed that “books of the craft of the world should not be read with book of holiness in one light”

Due to this belief, medical instruction took place primarily in a physicians home or in a hospital outside of the theological college.

In order to receive any kind of medical education before the 7th century it was believed that students were required to travel to Alexandria, as this was the only available facility to administer the formal teachings of medicine.

It was not however until the much later, close to the 12th century that there was a prescribed curriculum for medical education. Along side of the curriculum was also a formal exam and a diploma received upon completion of the exam. Despite evidence portraying this, it is also believed to be a very uncommon practice, even during the 12th century.

PHYSICIANS PLACE IN SOCIETY:

The rulers of Constantinople wanted to surround themselves with the best physicians possible and so they did. “Physicians who enjoyed the patronage of the rulers were, of course, at the top of the profession in terms of prestige and income. Otherwise, the majority of doctors probably had incomes similar to those of affluent shop keepers or merchants.”

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2 http://en.wikipedia.org/wiki/Byzantine_medicine
3 Prioreschi, 9
4 Prioreschi, 9-11
5 http://books.google.ca/books?id=qOIIpNOVObc&pg=PA376&lpg=PA376&dq=byzantine+physicians+salary+and+status&source=bl&ots=Rt8M5PccCJ&sig=LIYvaWn2yjiMgWrljLX94FtGrKE&hl=en&ei=FIaGS-7zmZmDw&sa=X&oi=book_result&ct=result&resnum=8&ved=0CCEQ6AEwBw#v=onepage&q=&f=false
Physicians held a high place in society but were still questions on their practices on a daily basis. In reading more about physicians place in society, we learn that there were some physicians who were in charge of looking after all physicians in one area, kind of like a Chief of Staff we would have in present day hospitals. It was also noted that there was one physician for approximately 300 citizens, making that physician very busy on a daily basis.

HOSPITALS:
Byzantine hospitals were designed with the purpose of “restoring their patients to health.”6 The hospitals, or “centers for the sick” were the first to offer care to the sick. The concept of the modern hospital originated in early Byzantine hospitals and were considered by some to be the models for hospitals in both the Islamic and Latin West worlds.7 The hospitals gained support from powerful Byzantine groups within the Eastern Roman society. These powerful groups included; “both public officials and private philanthropists, the bishops of the official church, monastic leaders, lay aristocrat, and for many centuries the medical men, sought to secure institutions for the sick which could provide both men and women with bed, board, nursing care, and the expertise of highly qualified physicians.”8

It is difficult to determine when exactly Byzantine hospitals were first organized for two reasons:

- **Sources use different terms to describe philanthropic institutions.** For example, words such as xenon or nosokomeion which have come to exclusively mean hospital may have possessed a more general meaning in the formative stages of Byzantine philanthropic institutions.
- **Philanthropic institutions of the Latin West developed much slower than those of the Byzantine East and did not begin to offer hospital care until the thirteenth century. Some scholars base their assertion only on the Western institutions and have claimed that true hospitals did not emerge as “distinct agencies for medical therapy until the nineteenth century”; simply ignoring the Byzantine medical institutions.9

The first evidence of philanthropic institutions is in the fourth century which were opened by the churches of the Roman Empire. A number of hostels were founded by Bishop Leontios (344-58) of Antioch for the poor and strangers of the city. Between 367 and 377, Eustathios, bishop of Sabasteia in Asia Minor, built a renowned ptochotropheion (a house to nourish the poor) for his city. Bishop Basil of Caesarea (370-79) built several lodges or inns (katagogia) outside of his city which were to serve

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6 Miller, 53
7 Prioreschi, 12
8 Miller, 53
9 Miller, 53
strangers, both those passing through and those who were in need of care because of some illness.\textsuperscript{10}

At the end of the fourth century, John Chrysostom, bishop of Constantinople (398-404), opened a similar philanthropic house to that of Bishop Basil and called them \textit{nosokomeia} or places to care for the sick. Chrysostom hired physicians, cooks, and servants, as well as, two priests as directors to staff the \textit{nosokomeia}.\textsuperscript{11} Although an exact date of the first Byzantine hospital or \textit{nosokomeia} is unknown it is certain that they existed by the end of the fourth century.

Much like today, Byzantine hospitals were located in larger cities. “Basil opened a medical facility near Caesarea, the economic, political, and ecclesiastical center of the large Cappadocian province. Chrysostom built his \textit{nosokomeia} in the imperial capital. Between 400 and 600, several xenones (hospitals) were built in Constantinople.” The cities of Antioch and Alexandria possessed a number of hospitals by the sixth century. At the end of the eighth century, the empress Irene founded a new hospital. “Following her example, the emperor Theophilus (829-42) opened the famous xenon which he designed to afford patients both a healthy exposure to the breezes and a beautiful view.”\textsuperscript{12}

\textbf{Below: Byzantine Hospital Ruins}\textsuperscript{13}

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\caption{Byzantine Hospital Ruins}
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\textsuperscript{11} & Miller, 55 \\
\textsuperscript{12} & Miller, 57 \\
\textsuperscript{13} & http://picasaweb.google.com/lh/photo/O4s3dgHHq6RLFx26fZwNEA
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Right: Home of Anthemius

It was originally the home of Anthemius, praetorian prefect of the eastern territory and grandfather of the emperor of the western Roman territory. He was assassinated in 472 BC. His mansions were turned into a home for the elderly and a church. It was located in the homonymous district in the western part of Constantinople, close to the cistern of Mocius on the seventh hill.14

Left: The Byzantine Doctor, Myrepsos Receiving the Patients, from a Greek Manuscript, 13th Century15

Right: Bishop St. Basil the Great of Caesarea (Doctor)16

14 http://www.pastoralhealth-ep.com/philanthropiccenters

15 http://www.mlahanas.de/Greeks/Medieval/MedievalGreece.html
ANARGYROI:

Along with hospitals, there were also Anargyroi who provided care for the sick. The Anargyroi, meaning “without money” were individuals who practiced supernatural medicine within healing institutions. The Anargyroi did not charge any fee for their services and were therefore open to all individuals requiring medical care. The medical practice of the Anargyroi was based on two martyr saints 1. Comas and 2. Damian. During the 6th century many churches had shrines dedicated to the saints and therefore many healing sessions took place within the church or simply near a shrine. In order to receive treatment an individual went to the church or shrine and spent the night. During sleep, one of the two saints would appear in a dream and suggest a treatment for the patient. The next day the treatment would be administered and the patient would then leave the church or shrine. Unlike the hospitals, the Anargyroi did not practice “conventional” medicine and at times many of the recommendations by the martyr saints were odd and at times sexual.

DISEASE AND CAUSES OF DEATH

For the Byzantines, death was looked at as the day without an evening or il ave?c?po; ilg?pa. They saw that was one way of entering the worked and many ways of leaving it. “Of the eighty-eight emperors who ruled, from the first Constantine to the twelve of that name, thirty seven died natural deaths, three died in accidents, five in battle, thirty by other forms of violence, and thirteen were forced to abdicate and enter a monastery, regarded as another kind of death.”

“Old for the Byzantines meant fifty of sixty years of age, with seventy and beyond being regarded as extremely old age, but, because of the high rate of infant mortality, it has been calculated that the average life expectancy in Byzantium was about thirty-five years.” The mortality rate for the first five years seems to have been about fifty percent, although reliable statistics are unattainable. “St. Mary the Younger had four sons, two of whom died before

17 Prioreschi, 14
18 Prioreschi, 13
19 Dennis, 1
20 Dennis, 2
21 Dennis, 2
their fifth birthday. In a village in Macedonia, about the year 1300, thirty-two babies were born; eight died within a year and another eight within five years.” The lives of saints and the miracle tales “furnish abundant medical information about their aqueducts and sewers, poor sanitation and, at times, scarcity of food contributed to the general morality, not only the poor but of wealthier citizens as well.” The plague was the most prevalent disease which caused numerous deaths. 22

Above: It is said that the bubonic plague has taken the lives of over two-hundred million people. The first recorded epidemic of this disease was in the Byzantine Empire during the sixth century. In modern times, there have been several classes of antibiotics that are effective in treating this disease. Those that have the bubonic plague today usually completely recover with immediate diagnosis and treatment. 23

A number of diseases threatened the Byzantines and despite advanced medical care the majority of time disease lead to death. The lives of saints and the miracle tales “furnish abundant medical information about their aqueducts and sewers, poor sanitation and, at times, scarcity of food contributed to the general morality, not only the poor but of wealthier citizens as well.” The plague was the most prevalent disease which caused numerous deaths. 24

Left: Image portrays how Byzantine doctors treated people suffering from lycanthropy, a mental disorder where a patient believes he or she is, or has transformed into, a wolf and behaves like one. This disease is the basis for the legendary werewolves. 25

Right: Byzantine Emperor Flavius Herclius Augustus (Heraclius) dies a natural death and discussed by Constantine III and Heaclonas

The bubonic plague is the best-known manifestation of the bacterial disease, plague.

22 Dennis, 4
24 Dennis, 4
It is an infection that enters through the skin and travels through the lymphatics. This is a disease that kills 50% of infected patients within four to seven days without treatment. Many believe that this disease is the “Black Death” that killed millions of people throughout Europe in the 1340s. This disease is known to develop from a bite of an infected flea, which are usually found on rodents such as rats, who seek out new prey once their hosts die. These bacteria will rapidly spread to the lymph nodes and multiply.

MAGIC IN BYZANTINE:

Students of ancient magic relied exclusively on texts of spells and charms and the instructions for affecting them contained in papyri and on what survives of the actual instruments employed to exercise magic such as amulets, engraved gemstone bracelets, and phylacteries. These particular materials are no substitute for the living practitioners of magic as primary evidence and their study opens a broad range of questions. People would wear amulets, rings and other protective devices inscribed with potent symbols and formulae to avert the bewitching glance of the envious evil eye.

Amulets constitute the most conspicuous means by which individuals sought to ward off the unseen evil around them. There were other devices with magical properties that could prove effective. Rings that were worn by people in Byzantium had a cryptic formula and mystical symbol that protected the wearer from harm.

Above: Ring worn to protect wearer from harm

Individuals tied rags to branches in the hopes of curing an ailment or receiving the ability to conceive a child on the part of a relative. There can be little doubt that the custom of tying rags to bushes is very ancient and survives from a time when most people were still nomads or at least

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26 HTTP://WWW.PARANORMALKNOWLEDGE.COM/ARTICLES/TAG/BYZANTINE-EMPIRE
not yet fully sedentary. The purpose of individuals engaging in this type of practice is not in question. There is much less certainty about the precise magical properties of the tree itself and the rag or of the site selected for the ritual and the processes by which the desired ends will be achieved. This example of magical practice serves to illustrate the difficulties that confront the scholar who seeks to comprehend the magical beliefs among people.

**Below:** Trees and bushes with rags tied to them

An irritating question is whether the excessive reliance of modern scholarship on the written text gives a distorted impression of magical practices. Some of these magical beliefs were frowned upon by the authorities both secular and religious as is evident from the writings of the church fathers which abound with strictures against the superstitious fear of the evil eye and the amulets associated with it. No amount of preaching seems to have had much effect on the use of amulets by the peasant and the artisan.

From what researchers can piece together of the lives of people occupying houses in the old palaestra at Anemurium is that magic for their humble residents was no abstract belief or perversion of true religion practiced in secret, as the sermons of the church fathers would have us believe, but was as common a function of daily existence as any other activity represented among the small finds.

**Specializations of Healers:**

Greeks believed that most ailments could be healed by prayers to the God of Medicine, Aescelpius, and the Great Temples where many Greeks went to seek healing. They would make sacrifices and pray to the God in return for having their ailment healed. But, this all changed with Hippocrates and his famous oath that is still used by doctors today to ‘Do No Harm’

During the 6th and 7th centuries there were two ways of acquiring medical attention in the Greek East. The first way was by apprenticeship to a practicing physician and the second by attendance at the lectures of a professor of medicine. The first way was the more accessible of the two
and was the time honored one, enshrined for us in the Hippocratic Oath. Although the first way may have been more accessible it wasn’t necessarily the most desirable way of the two because the higher the education, at least until the middle of the seventh century. In the classroom the study consisted mostly of readings from the works of Hippocrates and Galen and hearing them expounded by the teacher. This type of syllabus was designed to acquaint the learner with the main areas of an extensive subject. There was also and influence of methods borrowed from philosophers. The most important source of knowledge was from a group of school lecture notes that survive from the sixth and seventh centuries. Teachers relied quite heavily on deliberate repetition as a means to inculcate the central tenets of medical theory.

In the Byzantine Empire during the middle ages there was no tradition of scientific medicine and was drawn largely on Ancient Greek and Roman Knowledge. Observations went hand in hand with spiritual influences. A tension developed between the church and folk medicine since much of folk medicine was magical or mystical. Spells and incantations were used in conjunction with herbs and other remedies. Such spells had to be separated from the physical remedies, or replaced with Christian prayers or devotions. Similarly, the dependence upon the power of herbs or gems needed to be explained through Christianity.

The church taught that God sometimes punished people by giving them an illness and that repentance could lead to recovery. Because of this the practice of penance and pilgrimage came about as a means of curing an illness. During the Middle Ages some people did not consider medicine as a suitable profession for Christians because disease was often considered to be sent by God. God was considered the “divine physician” who sent illness to people depending on his will. Many monastic orders considered the care of the sick as their work of mercy.

**Left:** Medical Healers in Byzantine.
During the middle ages most people could claim that they “practiced medicine”. Simple forms of medicine were practiced in homes by families and if more knowledge or experience was needed most communities had individuals who had talents in treating different medical conditions that people encountered. Midwives and empirics are two examples of talented people in communities that could help others out when needed. Midwives were knowledgeable in herbs and herbal remedies while empirics specialized in dental problems, wounds, and certain types of surgeries (i.e., removing kidney stones, lancing boils, or repairing a hernia).

Some physicians knew how to suture wounds and would place raw meat on the wound to help healing and stimulate blood production. There were people that had higher levels of professionalization and these people included surgeons, university educated physicians, and skilled professional medical practitioners that were educated through apprenticeship and apothecaries. There was also secular and religious practitioners who combined religious duties with accepted medical practice.

There are no biographies, no details of training, and no specifics of women practices, but a picture was pieced together and the most important thing that came out of it was the women existed.

CONCLUSION:

After researching Medicine in Byzantine and looking at the comparisons between the Byzantine time period and today’s society our research has proven our thesis to be incorrect. Yes, Byzantine medicine was primitive, but healing was not based solely on prayer, witch doctors, and magic. The Byzantium folk were credited for early beginnings in medicinal practices. Compared to today’s society their practices were simplistic. With today’s technology, resources, and advanced medical knowledge we are able to build upon the early discoveries of Byzantine times.