

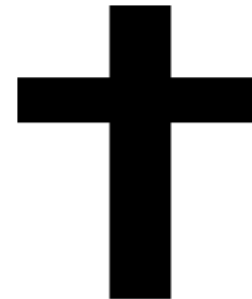
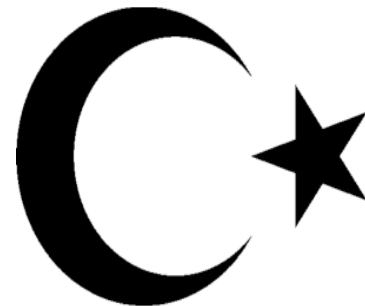
Unit 5 – The Byzantine Arabic and European Medicine



Universidad Complutense de Madrid, Spain

Middle-Age: 5th–15th Centuries

- Medicine is a synthesis between the Greek tradition mediated by the Galen’s works and the three cultural frameworks:
 - Byzantine: oriental Christianity
 - Islamic: Islamism
 - Western European: roman Christianity



Christianism and Medicine

- The Gospel and the duty to care sick
 - *But when he heard this, he said, “Those who are well have no need of a physician, but those who are sick” (Matt. 9, 12)*
 - *“It is not the healthy who need a doctor, but the sick. I have not come to call the righteous, but the sinners” (Marc. 2, 17)*
 - *“It is not the healthy who need a doctor, but the sick (Luke, V, 31)*



Diseases as wrath of God

- Jesus breaks with the traditional pre-Christian religion views: Mesopotamia and Egypt and related Hebrew elaboration in the Old Testament (Deuteronomy, Leviticus) and the Talmud

As he went along, he saw a man blind from birth. His disciples asked him “Rabbi, who sinned, this man or his parent, that he was born blind?” “Neither this man nor his parents sinned” said Jesus” but this happened so that the works of God might be displayed in him” (John, 9, 1-3)



The Christian ethical duty of care

- The love toward humankind as a condition for the love toward the art of care

Philanthropía

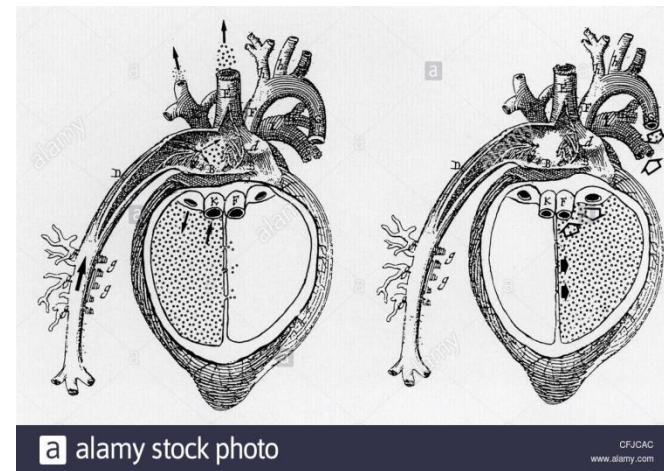
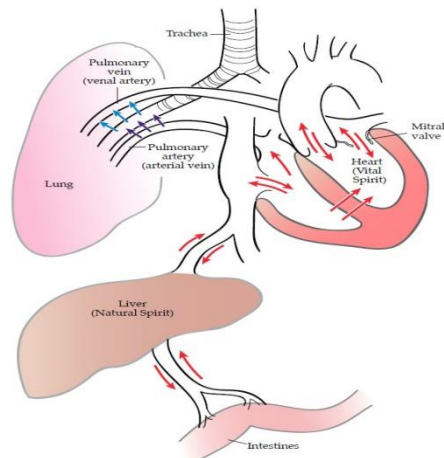
Philotekhnía

- *The birth of medical charity integrates ethical and clinical care and is the start of a process ended in the building of the first hospitals*



The Decline of Galenism

- At the end of the Hellenistic Age there are two different kind of physicians
 - Greek physicians: *iatrosophoi* using the Alexandrian interpretative method to read and comment the Hippocratic medicine works under the influence of the Athens Academia philosophy
 - Latin physicians: translators of Greek physicians and followers of Galen's medicine



Byzantine Medicine

- As a consequence of the division of the Roman Empire in Western and Eastern, Constantinople (Byzantium) became the capital of the Eastern Roman Empire in 330 AC until the 1453.
- The division consolidated a new reality in the Eastern side with the following characters:
 - Greek language
 - Christianity
 - Feudal economy
 - Hellenism

Medicine in the byzantine society

- Physician has a prestigious social role
- Tax exemption
- Building of hospitals
- Existence of two different practices:
 - One in continuity with Hippocratic medicine
 - Other with a superstitious character

Byzantine medicine and Hippocratic tradition

- Big influence of Galen's works due to the use of Greek language
- Decline of Galenism
 - Exhaustion of Greek culture
 - The difference between the "polis" and "imperium" as political organizations
 - Influence of Eastern cultures
 - The role of faith and religion in every form of knowledge
 - The decadence of Roman Empire and its civilization
 - Refuse of part of the Galen's works for its intrinsic Paganism
 - Softening of the physiological rationality

Byzantine medicine and superstitious culture

- Big influence of popular medicine
 - Pre-Hippocratic medicine: *incubatio*, use of the curative power of the hands, libation
 - Influence of Jewish Kabbalah
 - Influence of Egyptian medicine: *Thot* became *Hermes Trismegistus* in Greek
 - Astrology, Alchemy
 - Overlapping between Pagan and Christian culture in matter of religious rituals
 - St Cyrus and John: *anargyroi* (*no lucrative practice*)
 - *Christian incubatio*



Islam

- Muhammad (570-632) member of the tribe of Quraysh governing La Mecca
- Poor orphan becoming a rich merchant
- In the early 40 received a call: Qur'an (Koran) was revealed to him in vision
- The last prophet descending directly from Adam and Noah
- In 622 A.D. Hegira represents the foundation of Islam, the escape to Medina as consequence of prosecution of Muslims in La Mecca
- At the time of his death Islam conquered all Arabia

Arabic medicine

- Synthesis between Arabic tribes' magic and empirical medicine and Greek culture as consequence of the expansion of the Islam in Byzantine Empire and Middle East.
 - Hellenism
 - Islamic monotheism
- Translations of Greek science and medicine in the Islamic culture is produced by the religious belief:
 - “find knowledge even you need to go to China”
 - “who leaves his home to find knowledge will find the Allah’s way”

The translation of Greek medicine

Hunayan Ibn Ishaq (Iohannitus)

- Works of Hippocrates and Galen in Syriac
- Greek and Persian manuscripts into Syriac and Arabic of Hippocratic
- Nestorian Christian living in Baghdad
- Mesue' the Old
 - Director of the Bagdad Hospital
 - Translation of Greek medicine from Alexandria into Arabic

Isagoge of Iohannitus

- Textbook of reference for the Arabic medicine, translation of a work coming from the Alexandrian School, synthesis of galenic medicine in the Arabic world
- The translation movement represents an innovative approach to the teaching and learning of medicine and converted the Arabic language in an original language for a scholarship
- Hunayn authored a *Medical Questions and Answers*, a student textbook, following the division between the natural organization of the body and unnatural or contra-natural disease



Rhazes (854-925 A.D.)

- The most important clinician of Arabic Medicine
- *The Virtuous Life* (al- Hawi)
 - A clinical Encyclopedia, description of illnesses and exposition of the related clinical expertise
 - It highlights the discrepancies between Galen´s theory and his clinical experience
- *A treatise on the Small-pox and measles*
 - The first clinical monography on the small-pox focused on the clinical observation of the illness
- *The Comprehensive Book*
 - Introduction to medicine, anatomy, physiology and pathology
 - Comparison between Hippocratic medicine and direct observation

Avicenna (980-1037 A.D.)

- The most influent physician and philosopher of the Middle Age (born in the current Uzbekistan)
- *The Canon of Medicine* is a a medical encyclopaedia and became a standard handbook in the Middle and Modern Age medicine.
 - All clinical events have a causal reason
- *He applied the Aristotelian theory of casualty to medicine in the 4 causes of illness*
 - *Material cause: the body condition in specific circumstances*
 - *Efficient cause: the environmental or cultural habits*
 - *Formal cause: the body constitution*
 - *Final cause: the body functioning*

Medieval Medicine in Europe (V-XV CE)

- Monastic medicine
 - Priest-doctor responds to the Christian duty to assist sick people
 - It is considered as a philosophy more than a science
 - It is influenced by the humoral theory and some Hippocratic reference but not for the entire corpus Hippocratic
 - Some works of Rufus, Dioscorides and Galen and fragments of Byzantine medicine
- Non-monastic medicine
 - Jews doctors
 - Byzantine doctors
 - Doctors located in the Barbarians Kingdom

The School of Salerno

- Opened in the X c. in Salerno (South of Italy)
 - Primitive stage
 - Influence of Byzantine medicine
 - Pathology focussed on the Hippocratic theory of humour
 - High Salerno
 - Constantine the African translations from Arabic to Latin
 - *Method of Healing* Galen
 - *Johannitius's Isagoge'*
 - *Aphorism* Hippocrates
 - Low Salerno
 - Birth of the Universities
 - Decline of the School

Universities

- Since the XII c. the Universities assume progressively the monopoly of knowledge and define a standard of education
 - Scholasticism as learning and teaching standard method in medicine
 - Encyclopaedic approach to natural sciences
 - Experimental method
- The most important medical schools: Montpellier, Bologna, Padua, Florence
- Case-based learning
 - *Consilium* of Tadeo Alderotti: focused on the single clinical case (case study) is useful for the patient (patient-centred medicine) and the medical student

Medicine from the point of view of orthodox theology

- Affirmative and positive approach
- Jesus Christ heals many sick people, both physically and spiritually.
- Church tradition sees Jesus Christ as a “Healer of the soul and of body”
- Orthodox theology clearly emphasizes the limitations of medicine: medical healing and restoration of health are temporarily, the salvation given by God is eternal

Medicine as God's gift to human

- Basile the Great: Medicine is a God's gift due to human weakness before pain and disease
- Medicine as a pattern for the healing of the soul: as one takes care of his health, in the same way one should care for his/her ethical and spiritual life
- Medicine as a special way of loving and caring for one's neighbor



Orthodox Liturgical Life

- Orthodox Church, acknowledging the significance of disease and healing, has very early integrated praying for the patients in daily liturgical life
- The Sacrament of Anointing (Mark 6, 13)
- The pray in the Divine Liturgy for relief of pain, healing of sick, painless death and salvation

Medicine and Church's diaconia of the sick in the Byzantine Empire

- Byzantine *xenones* – the first public institutions to offer medical services to the sick
- „Basilias“ - St Basil built a hospital in 370, in a suburb of Caesarea, with all the necessary qualified staff.
- Gregory the Theologian: *Basilias* a "new city" of charity and diaconia
- The Pantocrator Monastery in Constantinople had numerous philanthropic facilities, such as hostels for guests and strangers, homes for the elderly and specialized hospitals