# HEART AND DEATH BETWEEN MEDICINE SCIENCE AND RELIGION

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#### Abstract

Diseases of any kind appear due own sins or within the divine pedagogy, for our testing, and by healing we can show the glory of God. Science of treat is from God, but the gift of healing is ontological. Patients do not heal by the power of the therapist, the doctor, but also because of the gift and power of God. Diseases inevitably sometimes lead to death but are not frightening the Christian because he believes in the afterlife. For a true Christian there is not nothingness, death is only a transition, body leaving is just only a higher level in the spiritual life. It is the duty not only of the priest but also of the doctor to prepare the patients for this purpose.

Keywords: cardiovascular disease, patient, heart

#### 1. Introduction

One third of the total number of deaths worldwide is caused by cardiovascular disease, which constitutes the leading cause of death worldwide. It is estimated that 17 million people die annually from cardiovascular disease and at every two seconds a death occurs as a result of cardiovascular disease, heart attack every five seconds and a stroke every six seconds. Moreover, cardiovascular diseases are responsible for more deaths worldwide than cancer, chronic respiratory failure and diabetes combined. In addition to the impact they have on countries and population as factors of death, cardiovascular disease are also a major cause of disability and chronic conditions, representing a considerable burden on health systems and economics. By 2020, it is estimated that cardiovascular disease will be the leading cause of disability, ahead of infectious diseases [http://www.who.int/cardiovascular\_diseases].

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In the history of Medical science, the 'disease' term (from the Latin *infirmitas*) received various definitions - e.g.: "Disturbance of the normal state of an organism (human or animal)" [1].

Strictly scientific, it is said that the 'disease' is an alteration, an physiological, morphological, biochemical imbalance, which entails pain, a symptom more or less expressed. Theorists and philosophers have tried to find a definition, reaching idea that the disease is "a lack of well-being" [1].

In most medical books every disease has a box of 'aetiology' or 'aetiopathogenesis' where the author tries to express probable causes of each disease. With a few exceptions, there is no absolute relationship because exposed to the same conditions, some people do and others not do the disease. Why is happening something like this? No branch of Medicine could not give a clear answer and always occur several reasons why 'possibly incriminating' [1].

Anyone who has practiced Medicine for several years have seen the evolution of 'incomprehensible', sometimes in many cases: patients whose disease appears suddenly, people who do not get sick despite exposure to noxious aggressive environments, people very sick that heal miraculous, get sick easily with fatal outcome, patients with relapse despite numerous previous healings, and finally the debut in myriad forms of evolution, complications, despite the fact that the disease remains the same.

Daniel Vernet reminds us that in front of disease will always be present only three persons: the patient, the doctor and God. The patient and the doctor will not understand what the Creator forever and always knew about each everyone [2].

Theology tries to find the cause of illnesses in relationship with created humans and the Creator. Human illness occurred after the fall of Eden when all nature and the Universe were troubled and disturbed from harmony too [1].

Disease is often a test, it has an initiative value. Orson F. Whitney said "No pain that we suffer, no trial that we experience is wasted. It ministers to our education, to the development of such qualities as patience, faith, fortitude and humility. All that we suffer and all that we endure, especially when we endure it patiently, builds up our characters, purifies our hearts, expands our souls, and makes us more tender and charitable, more worthy to be called the children of God... and it is through sorrow and suffering, toil and tribulation, that we gain the education that we come here to acquire and which will make us more like our Father and Mother in heaven." [3]

#### 2. Heart and death in Medicine

Heart is the representative body of the cardiovascular system, being located in the chest and has a vital role in maintaining blood flow and life. It has three parts: the myocardium, endocardium and epicardial, and four chambers: the right and the left atrium and the right and the left ventricle.

The most common heart disease are: hypertension, ischemic cardiomyopathy, arrhythmias and valve failures. Associated with all these diseases may come the heart attack or heart failure. The risk factors that can be controlled are high cholesterol, obesity, diabetes and smoking [http://www.who.int/cardiovascular\_diseases].

Ischemic cardiomyopathy describes the myocardial changes: the weakened heart has no power to pump blood throughout the body, so it accumulates in the lower chambers of the heart (ventricles), which expand. Heart muscle loses its shape and becomes weaker [4].

Normally heartbeat is rhythmic. Sometimes become irregular: when accelerating, when slowing. Usually, cardiac arrhythmias are harmless and go quickly, but some types can even lead to loss of consciousness (when the pulse is below 20 beats per minute or more than 200 beats per minute). There is also the risk of heart stopping requiring resuscitative measures (heart massage, artificial respiration, defibrillation).

Heart failure occurs when the heart muscle does not pump the right amount of blood throughout the body. Heart does not stop, but is not working at full capacity and begin to grow in size. This can lead to stroke, heart attack and pulmonary embolism.

Physiological death is indeed like a passage; Medical science describes the gradual installation of signs of death: loss of life relationship, loss of vegetative life (loss of feeling), no breath, lack of movement, abolition of reflexes, hypotonia [5].

Clinical death takes about 3-5 minutes (time of first appearance circulation failure and brain damage). Biological death is when brain cells die because of lack of oxygen (hypoxia). Biological death follows clinical death. After stopping the heart, the eyes can see five seconds, ears hear eight seconds, the thinking process is still coherent 18 seconds [5].

Myocardium tolerates anoxia for up to 3 hours after brain death. Blood remains viable within hours.

Death is a process that begins with agony, phase shorter or longer depending on how death occurs. Is therefore a pass, its moments are dramatic, both biologically and spiritually.

### 3. Heart and death in religion

The heart is one of the most important organ of our body's anatomy. It is recorded about 739 times in the Old Testament and about 169 times in the New Testament. The unity of the human person, which is a *suigeneris* concrete unit, fully manifested in his actions, is shown in Holy Scripture by the heart concept. In the Old Testament the heart is considered the vital centre of the person. Heart covers all manifestations of life body and soul [1, p. 17].

Some of the most important Orthodox religion fathers knew the significance of this organ of the body, the heart that beats in our chest until our soul leaves. In their opinion heart is comprehensive in every moment of our

thoughts, facts, omissions and intentions, is repulsive or inviting in the Kingdom of God.

An example of how they characterize a pure heart is given by Saint Symeon the New Theologian: "There is not one virtue, or even two or ten, which can bring about a pure heart [...] But even then, they cannot produce a pure heart by themselves without the presence and the actions of the Spirit". The same Symeon also says: "I understand that a pure heart is to think not to hurt anyone but also to have in us the remembering of God through invincible love" [6].

In her book entitled 'Le symbolisme humain du corps', the famous Souzenelle Annick discusses about the heart as a centre on which the Apostle John laid his head on the chest of Christ and listened to His heartbeat. Apostles Judas and John are seen as dark and light, Judas the traitor being the right side of the heart that is dark and John the left side of the heart that is light [7].

Heart disease appears in biblical writings. For example about the numbness of heart speaks Deuteronomy 28.28 and signifies the punishment for those who break the law; heart trembling still appears in Deuteronomy 28.65 and refers to the punishment for the transgressors by law: "trembling heart, melting eyes and heart pain" [8].

Relentless pulsations of the heart are a miracle. It is said that when the heart stops, ceases its existence; perhaps it is the opposite: when life here ends the heart ceases to beat, last beat is the boundary between two lives, between two times. This belief, that the last battle opens a Heaven gate for all of us, is the power that saves the dying of terrible fear and alienation.

Saint Mark the Ascetic say that our end may be known by how heart spent a lifetime: if we chose and lived easily under the burden pleasures, at the death moment our heart becomes the soul's 'imprisonment and chain' extending the excruciating pain of separation from the body; if we accept labours and saw in them only deserved punishment or temptations, the heart will become "an open door" [8].

#### 4. Conclusion

The heart is considered a noble organ by almost all world cultures.

Cardiovascular disease are characterized by disorders of the heart and of the great vessels (arteries and veins) coming and going directly from heart.

When one is suffering feels the need to confess, and in this way they receive the disease and sometimes death with resignation. It seems that the best health insurance in the world is a strong relationship with God, while the doctor is just an ordinary man by which God heals the sick person.

#### References

- [1] P. Chirila and M. Valica, *Meditatie la medicina biblica*, Asociatia filantropica medicala crestina Christiana, Bucuresti, 1992, 218.
- [2] D. Vernet, Médicine et Médicins devant la Biblie. Hier et aujourd'hui, La Cause, Paris, 1987.

- [3] O.F. Whitney, *The Life of Heber C. Kimball. Faith Precedes the Miracle*, Deseret Book Co., Salt Lake City, 1972, 98.
- [4] T. Thom, N. Haase, W. Rosamond, V.J. Howard, J. Rumsfeld, T. Manolio, Z.J. Zheng, K. Flegal, C. O'Donnell, S. Kitnner, D. Lloyd-Jones, D.C. Goff Jr, Y. Hong, R. Adams, G. Friday, K. Furie, P. Gorelick, B. Kissela, J. Marler, J. Meigs, V. Roger, S. Sidney, P. Sorlie, J. Steinberger, S. Wasserthiel-Smoller, M. Wilson and P. Wolf, Circulation, 113 (2006) e85-e151.
- [5] V. Belis, Medicina legala in practica judiciara, Editura Juridica, Bucuresti, 2003, 36.
- [6] D. Stăniloaie, *Filocalia*, Vol. 6, Institutul Biblic si de Misiune Ortodoxa, Bucuresti, 1977, 208.
- [7] A Souzenelle, *Le symbolisme du corp human. De l'arbre de vie au schema corporel*, 3<sup>rd</sup> edn., Editions Dangles, Saint-Jean-de-Braye, 1984, 239.
- [8] I.S. Usca, Vechiul Testament in talcuirea Sfintilor Parinti Deuteronomul, Christiana, Bucharest, 2002, 90-92.
- [9] G.H.E. Palmer, P. Sherard and B.K. Ware, *Philokalia The Eastern Christian Spiritual Texts*, Skylight Paths Publishing, Woodstock, 2006, 37.