The Health Care System in Armenia
(The Historical, Social, and Theological Perspective: Past, Present, and Prospects)

Bishop Bagrat (Vazgen) Galstanyan

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By: Bishop Bagrat (Vazgen) Galstanyan

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Signed by the final examining committee:

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Chair: Jean-Michel Roessli PhD

____
Examiner: Paul Allen PhD,

____
Examiner: Lucian Turcescu PhD

____
Supervisor: Christine Jamieson PhD

ABSTRACT

The Health Care System in Armenia
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The history of Armenia and Armenians remains little known to the world. Yet, it has contributed to the global enrichment and advancement in many areas such as culture, science, religion, politics etc. This thesis, in its entirety is aimed at disclosing and presenting a very small part of the rich experience and practice of Armenians in the field of science and that of medical science. It explores the profound heritage and past practice of medicine in Armenia and how it can apply to the modern day health care system and serve as a valuable tool for the betterment and progress of health care performance.

It has been 20 years since the Republic of Armenia has declared independence and is going through many changes on all levels of society. Being in a transition period there are still internal and external unresolved issues, hardships, difficulties and challenges that the people are facing. In this environment the health care system is not an exception. By illustrating the historical background and by giving the ethical and theological perspective, this thesis aims to provide valuable assistance that could impact the performance of medicine in Armenia and provide a necessary means in the bioethical decision-making process. The thesis examines the modern health care system through a theological and bioethical prism; a first attempt to apply a theological analysis of the field of medicine in a cultural context.

The thesis proceeds in three parts: first, it illustrates the historical background of medicine and its development in Armenia beginning from pre-Christian era up to the Middle Ages and the definition of sickness and the moral code of the doctor. Second, it presents the current status of the health care system of Armenia, the reform process and challenges, ethical deliberation and the specific issue of gender abortion. Third, it analyzes the basics and foundations of theology in relation to medicine and the questions that are nowadays pertinent in Armenia.

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Introduction:
The Health Care System in Armenia
(The Historical, Social, and Theological Perspective:
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The purpose of this thesis is to explore the current health care system in one of the former Soviet Republics, Armenia, to analyze and discuss its historical background, current situation and future prospects examined and analyzed through the ethical and theological perspective.

Compared to the other Republics, Armenia has suffered severely in the aftermath of the collapse of the Soviet Union. The country had inherited a vertically centralized system, officially free of charge services, planned budget, reimbursement based on reporting where quality indicators were undermined, the focus was on in-patient care but in reality it had a poor clinical practice. There were number of incidents that resulted in harsh effects on the Armenian reality. Besides the very rigidly centralized economic breakdown, the newly independent country had to cope with the devastating earthquake, the war with Azerbaijan, to protect the rights of the Armenian population of the Armenian enclave of Nagorno Kharabagh, and a total blockade by Turkey and Azerbaijan. It has become a landlocked country with no safe, open borders, which further complicated the situation, harsh winters, lack of electricity, and heating, scarcity of food, the poor quality of drinking water and a shortage of supplies, had put the country at the edge of collapse.

In summary, to characterize the inherited system and to depict the general conditions of the health care system, a number of issues stand out, which clearly demonstrate the state of affairs that the country was going through and can be identified as follows: excess capacities and deteriorated facilities, outdated technologies and scarce human resources, poor financial resources, disparities between the urban and rural sectors, poor health indicators; earthquake, severe energy crisis, imposed war, economic collapse and poverty.

It is noteworthy that in the post-Soviet era, where almost all socio-economic sectors of the former soviet republics were paralyzed and had collapsed, there was an urgent need to re-create new social structure in accordance with the changing value-system within the society. A change of political order required new political, social, economic structures, constitutions, and rules and regulations to secure the transition to and appropriation of a new democratic, free market society with all its challenges. All these factors tremendously affected the healthcare system also.

While discussing the historical aspect of ancient Armenian medicine, this thesis presents the rich cultural heritage of medical science of Armenia, which has a history of almost 4000 years. It has contributed richly to the advancement of the universal treasury of natural medicine, which is an inseparable part of ancient Armenian culture and is deeply rooted in the practice of modern-day medicine. It explores the health and social institutions and the healthcare concept in ancient Armenia, the definition of sickness and the perception of the doctor in medieval Armenia. However, it has to be mentioned that it presents only a brief account of the extensive medical history of Armenia as it was not the main purpose of this thesis. It is very important to outline the history and practice of

medical perception in ancient Armenia as it still has its implications in today's performance. By comparing the past and the present, it is obvious that the trend in the modern health care system is more inclined to focus on primary health care, prevention and patient-centered care, just as was the practice of by-gone centuries. Thus, the first chapter illustrates medical practices and perceptions relevant in Armenia in the pre-Christian era, its transformation after adopting Christianity in the 4th century, its rise and development, conceptualization and systematization of medical science in the Middle Ages, and the high standards that were ascribed to the doctors and their calling. This practice of the past centuries is still pertinent and remains a valuable source in present day applications, especially when dealing with some ethical issues.

Subsequently, this thesis examines and evaluates the state and trends of health care, as well as the comprehensive reform program in Armenia. It portrays the overall description of the socio-economic situation of the Republic of Armenia throughout early years of its independence (1991-1995), which has gradually normalized and seen many reforms in all segments of life particularly in the health care system. Despite facing serious problems and hardships, the health care system and quality of medical care has gone through many changes and has improved tremendously. Throughout these years, the Armenian diaspora, as well as the International community have been assisting in these efforts by providing substantial expertise, material aid, modern technology and equipment. Thus, the thesis reviews the information, available sources and materials concerning the results of reforms that are to meet all the objectives of health care policy. It deals with the challenging issues of health care services, the impact of socio-economic factors, the principle of equality and corruption. It discusses the resources required while

taking into consideration the resource availability, which is one of the most difficult global problem even in the most developed countries. The thesis renders the means, principles, benefits, indeed, always considering the ethical issues that may rise out of the imbalance between market and social values. It involves questions of distributive justice because health care resources are nearly always scarce relative to need. Thus, this thesis reflects upon the status of the ethical aspect and has explored the organizational ethics of the health care system of Armenia, and how it ethically responds to internal or external stimulus. Also elaborates on organizational culture, underlines and expresses the values of the system irrespective of governmental and/or regulatory laws. This thesis presents an assessment of the performance of the health system against a number of key performance dimensions: health system stewardship, health management, information system, development of human resources, equity in financing and financial protection, health system efficiency, access to health care services, the quality and safety of health care services, risk factors, health promotion and education, health system responsiveness, and improvement in health status.

It presents a specific bioethical issue that is currently very pertinent in Armenia, that is, the problem of sex-selective abortion, which violates the principle of gender equality and affects the country by creating a population imbalance. I have used information from published and electronic sources based on findings and reports of domestic and international organizations such as World Health Organization (WHO), European Observatory Health Care Systems in Transition, USAID, UNICEF, Ministry of Health Armenia, National Statistical Service, Armenia Demographic and Health Survey etc.

The thesis concludes by recapitulating the contribution of theology and especially that of Armenian Orthodox theology with regards to questions of bioethics. It discusses the foundational and conceptual theological affirmations, which can serve as a tool in dealing with difficult biomedical issues in decision-making. It illustrates the importance the Church has given to science and medical science through her doctrinal, sacramental liturgical life, the Christian understanding of medical science and the significance of the contribution of theology and healthcare ethics that can be introduced in the Healthcare System in Armenia.

Chapter 1
Medicine in Ancient and Medieval Armenia

1.1 *Overview: Medicine in Pre-Christian Era*

Armenian medical science has a history of almost 4000 years and has contributed richly to the advancement of the universal treasury of natural medicine. It is an inseparable part of ancient Armenian culture and is deeply rooted in the practice of modern day medicine. Armenia has amassed the experience and knowledge of many generations of physicians on the curative properties of minerals, plants, and animals.

In ancient times, mineral-based medicines such as Armenian clay (*Armenian Bole*, *Bolus Armenia*), Armenian stone (*Pietra Armena*), Snake-stone (Odzaqar, Lapis ophites), Armenian salpeter and soda were well known, as were compounds of mercury, iron, zinc and lead, all of which exported to neighboring countries.[1] In addition to medicinal plants and minerals, medicines prepared from the organs and tissues of animals were in extensive use because of their fermentative properties. They utilized extracts of endocrine glands, brain, spleen, liver, the bile of certain animals, the rennet of the rabbit as well as the "*moist zufa*" a plant-animal mixed compound. The above-mentioned medicines had antitoxic, stimulating, hormonal, anti-sclerotic, antiseptic, anti-tumor properties, which are of great value for modern medicine as well.[2]

Medicine in Pre-Christian Era: Tools and medical instruments unearthed through archaeological excavations have given us an insight on the importance of hygiene and medicine practiced in the Armenian highlands from the 15th-13th centuries BC.

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[1] Xenophon, *Anabasis*, Moscow-Leningrad, 1951, Book IV.

[2] Stella Vardanyan, *History of Armenian Medicine (from Ancient times to Modern days)*, Yerevan, 2000, pp. 30-35.

Clean water and good irrigation were two prominent components to good health. The construction of canals is well documented in Ancient Armenian manuscripts and historiography. One remarkable example is that of the canal constructed during the reign of King Menua, who ruled the Urartian State (Ararat) from 810-786BC. The Assyrian Queen Semiramis is credited with the construction of this canal as well as many beautiful gardens. The canal supplied clean drinking water to the capital city of Tushpa (Van) and is testimony to the importance given to sanitation throughout the city. Movses Khorenatsi (Moses of Khorene 5th century) known as the Father of Armenian historiography, writes: "[She] also built marvellous, amazing bath houses matching the city's layout. Splitting a part of the river into streams [she] draws the water through the city to irrigate all kinds of green and floral gardens. [She] decorates eastern, northern and southern parts of the city with palaces, leafy trees, and there she builds numerous bountiful gardens and vineyards". [3]

Traditionally, cold spring water in Armenia was famed for having curing properties. Around the springs emerged not only places of worship dedicated to the pagan goddess of love and fertility, Astghik but they also became gathering places for the sick suffering from various skin diseases. These are considered to be prototypes of modern dermatology hospitals.

In Armenia, *springs and river headwaters* were both acknowledged as idols. Referring to this fact, Abeghyan writes, "The fish-shaped monuments found in the mountains in Armenia were erected for the goddess of water Astghik-Derketo who was

[3] Movses of Khorene, (5th century) *History of Armenia*, by S. Malkhasyan, Yerevan, 1968, Book I, Chapter 16.

depicted in the form of a fish. This was the time when irrigating canals were built and executed in Dvin and Artashat, and in other areas of the Ararat Valley''.[4]

Further on, Abeghyan writes: "Springs should not be mistreated; one cannot spit in the spring water. A number of springs are worshiped as Christian sanctuaries. On Sundays and Fridays people burn candles there and offer sacrificial roosters. Among Armenians the cult of springs is related to the belief that they give health to people. Some worshiped springs are considered to cure all kinds of pain, still others are believed to cure only certain disease; fever and skin diseases in particular''.[5]

One of the important hydropath centers in Armenia is the Temple of Garni, a renowned center for worship of the pre-Christian period, built in the 1st century B.C. The temple was also recognized by the name *"umbrella-house"*. This name, along with all other names used to define the temple of Garni in the Christian period, was related to rest and recuperation. S.Vardanyan claims, that "It is believed that due to the temperate climate and the tasty waters with curing effects, Garni used to serve as a resort''.[6] The belief that springs, in addition to having hygienic importance, served as places for curing various human diseases is illustrated by Theodoros Salahunie's story of martyrology.[7]

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[4] Manuk Abeghyan, *Monuments called 'Vishapner'(Dragons) as Monuments to goddess Astghik-Derketo*, Vol. 7, p. 171.

[5] Manuk Abeghyan, *Armenian Folk Beliefs*, Vol.6, p.52

[6] Stella Vardanyan, *History of Armenian Medicine (from Ancient times to Modern days)*, Yerevan, 2000, p.28.

[7] St. Theodoros was born in 269 in the village of Salahuni of Historic Armenia. At the age of fifteen, he is infected with leprosy. His mother builds a leper colony in the area called Arbenut located near the springs that were believed to have curing power. Lepers from different places would gather in this spot. Later on he was martyred for not refuting Christianity and a shrine was built on the site. The spring becomes the place of martyrdom and burial of St. Theodoros. In addition to the curative property of the water it is believed that the spring is empowered by the grace of the martyr, making the place a sanctuary of miraculous healing. See Ghevond, Alishan, *[Hushik Hayreneats Hayots]* (Memories of Motherland Armenia), Vol. 1, Venice, 1869-70, p.216

Special shrines, dedicated to the saints who were martyred in the vicinity, were built around these springs. Later on, these shrines became the paradigm for future day clinics. One of the most significant clinics for healing leprosy was in Arbenut (because of its curative mineral waters for lepers): "The first leper colony in Western Europe was founded in 570, that is to say 300 years after the sanctification of Arbenut".[8]

The significance of water as a means of cleansing was enhanced by the sanctifying power of Baptism as seen later in Christianity. It was claimed as one of the curing remedies for leprosy as early as the first centuries of Christianity.

It is interesting that in the Armenian and Caucasian Christian tradition, curing leprosy and other skin diseases in medicinal waters is related to the conversion stories of royal families. It is well documented in the narratives of the first Armenian Christian king, Abgar, Tiridates the Great, the Georgian king Mihran as well as Constantine the Great. Indeed, one should also recognize the spiritual message in all these accounts, illustrating their conversion from paganism to Christianity as transformation from spiritual sickness to health. [9]

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[8] Stella Vardanyan, *History of Armenian Medicine* p. 29

[9] King Abgar of Edessa lived in the first century A.D. According to tradition he was suffering from "severe pain he got 7 years ago in Persia, but as there was no way for him to be treated by people, he wrote a pleading letter to Christ, so that He comes and cures his disease". In his letter to Christ, King Abgar addresses the Saviour, "I have heard about you and your power to heal without medicine and herbs". As we see there are two types of treatment mentioned here: medicinal therapy and phythotherapy (herbal roots). What Abgar means is that Christ cures people by divine power and not by applying common remedies. Movses of Khorene then writes that after the resurrection of Christ, St. Thaddeus comes to Edessa first and then to Armenia. While in Edessa he cures Abgar and then all the other people who were suffering from different kinds of ailments. (Movses of Khorene, Book II, Ch. 30, 727).

According to Movses of Khorene, Constantine's "body was defiled by 'yelpand' leprosy". (Movses of Khoren, *History of Armenia*, Book II, Ch. 83). S. Malkhasyants in his annotation of Khorenatsi's *History* refers to this type of leprosy as follows: " 'yelpand leprosy' is the same as elephant leprosy. It is the type of disease that covers the whole body with a rough shuck resembling elephant skin. In medicine the disease is

In examining ancient medical perception, imagination, and the ancient outlook on medicine, it should be rightfully acknowledged that these aspects were "substantially impacted by philosophical and medical perceptions, often recognized as demonological medicine in the neighbouring countries of Babylon and Assyria. The perceptions in Asia Minor and in the Armenian Highland were closely linked to the spiritual system of medicine of Ancient Egypt, too. According to those medical beliefs, illness was attributed to evil spirits. In order to avoid evil spirits it was recommended to wear charms and amulets or to practice the power of prayers and witchcraft".[10]

Medical perceptions of illness and health in ancient Armenia have also been reflected in the people's *faith and beliefs*, which were passed down through millennia. Like other ancient nations, Armenians had their own god of medicine named Khaldi who was the chief deity in the Urartian mythical pantheon. There was also another god, Irmusn, who was worshiped as the guardian of illnesses. Thus, based on ancient understanding, human life and human health were affected by good and evil divine forces related to illness and medicine, which were to continue existing as perceptions of goodness and evil in people's faith and beliefs. Another example of ***mythical perceptions*** of medicine was the belief concerning the '*aralez*'[11] - the dogs believed to lick wounds to heal them. This myth also persisted during Christianity.

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called Elephantiasis greacorum, i.e. Greek elephant leprosy". He was cleansed by being baptised. See Movses of Khorene, (5th century) *History of Armenia*, by S. Malkhasyan, Yerevan, 1968.

[10] S.Vardanyan, *History of Armenian Medicine – From Ancient Times to Modern Period*, Yerevan 2000, p. 20

[11] The word 'aralez' has two etymological explanations; the first one is related to the word 'haralez' (yaralez) the roots of which mean 'hara'- continuous and 'lez-lizel'- to lick. The belief attributed to this was that the dogs continuously licked the body of the sick or the dead, until they were healed. According to the second explanation, the word 'aralez' is related to the name of Ara the Beautiful (legendary king of Armenia) and 'lez'-to lick. The legend says the dogs revived Ara the Beautiful by licking and healing his

Ceremonial medical beliefs in the pre-Christian era were symbolized by stone phallus-monuments, which represented fertility and were believed to have curing powers for female infertility. This belief lived long after the adoption of Christianity, through stones called '***portakar***' (*umbilicus stones*). Until the beginning of the 20th century, women would refer to the power of those stones. As stated by Stella Vardanyan, other than ceremonial magical medicine, surgical and herbal curing methods (although still in their embryonic stage) were also applied. This was evidenced by the findings of archaeological excavations. During excavations conducted in 1926 in Avan, a suburban area of Yerevan, they found a skull (dating back to the Urartian period) that had a cranial trepanation hole (4x1) of rectangular shape. Whereas the skulls found since 1867 by renowned Parisian surgeon and anthropologist Paul Brosa and other scholars in the territory of France and other European countries, had trepanation holes drilled into the temporal and were oval in shape. It is not excluded that drilling or trepanation was initially performed at worship rituals and later it was practised for the purpose of curing headaches and epileptic seizures.[12]

Folk medicine and the art of curing diseases with medicinal herbs was mastered by a great number of people and was highly advanced in Ancient Armenia. This is well documented in the Annals by Cornelius Tacitus (55/57-125 A.D.).[13] Curing methods

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wounds. The belief of dogs possessing healing powers has been quite strong, even after the adoption of Christianity. See Movses of Khorene, *History of Armenia*, Book V Ch. 36.

[12] ibid, p.22

[13] In Chapter 12 he says: "When instigated by the Romans, the Georgian King Parsman invades Armenia, trying to capture the Armenian throne, he combats powerful Armenian-Parthian forces. Before leaving the Armenian territory, he wounds his pregnant wife Zenobia with his dagger and throws her into the river Arax. At that time, the Armenian peasants from nearby villages, spot the woman in the river, take her out, and as Tacitus says, "dress her wounds and apply village remedies". Tacitus, *The Annals*, Yerevan, 1981, Chapter 12, http://classics.mit.edu/Tacitus/annals.8.xii.html, *The Annals* written by Tacitus 109 AC, Translated by Alfred John Church and William Jackson Brodribb.

using medicinal herbs have brought about the worship of plants and prophesies involving plants. Plane trees (*Platanus orientalis*), for example, were considered cult objects. Armenian kings owned forests and groves of plane trees.[14] The name Sosanver (devoted to plane trees) is related to the cult of planes. Referring to this belief, Movses Khorenatsi writes, "It was, according to religious cult, dedicated to the plane trees of Armenak in the town of Armavir where for a long time people would make prophecies taking into consideration the movements of the leaves, the strength and direction of the wind". [15]

A prominent scholar Manuk Abeghyan writes about the cult of trees, "Trees also give health, some of them cure all kinds of pain, still others cure some diseases, fever in particular. In order to be cured by the tree you should cut a piece off your clothes and tie it or nail it onto the tree. It is believed that in this way a disease is transferred to the tree...they also apply resin from trees on the surface of ailing skin. When trees dry out they still continue to be worshiped and rotten tree material is used for medicinal purposes".[16] It is worth mentioning that the cult of trees, as well as soothing the body with tree flowers was based on people's life experience. As S. Vardanyan writes, "The leaves and especially the bark of plane trees had pure medicinal properties: they cured skin of various diseases, even of leprosy".[17] In ancient Armenia not only plants, but also, soil and minerals, such as Armenian clay (Bolus armena) and Armenian stone (Pietra armena) were used for medicinal purposes. Referring to Armenian clay, S.Vardanyan

[14] The 5th century historian Ghazar Parpetsi gives an extensive account of the Armenian flora of the Araratian Valley see Ghazar Parpetsi, *History of Armenia*, by B. Uloubabyan, Yerevan, 1982, p.23. There are substantial amount of references about the incredible curing properties of the Armenian plants and nature in in non-Armenian sources such as renowned ancient biologist Dioscorides in his *Materia Medica* and Pliny (Senior) in *Natural History* and many others. See Dioscrides, Codex Vindobonesis, 1 der Osterreichischen Nationalbibliothek, Graz, 1970. Pliny, *Natural History*, London, 1961, Book 19, vol. 5.
[15] Movses of Khorene, *History of Armenia*, Book I, Ch. 20
[16] M. Abeghyan, *Armenian Folk Beliefs*, Vol. 8, Yerevan, 1975, pp. 52-53
[17] StellaVardanyan, *History of Armenian Medicine*, p.32

writes, "it contains what we know today as aluminum silicates and iron oxide, and it is used as a remedy due to its anti-inflammatory, anti-allergic, and even antitumor properties.''[18]

However, the real change of perception, as well as, a more scientific approach towards medicine, in Armenia took place between the 4th and the 1st centuries B.C., through the influence of the Hellenistic culture. This was the period when Greek artists, scholars, and physicians were present in Armenia. It was due to the Hellenistic influence that Armenia saw a gradual shift from old concepts to rational experimental approaches.[19]

1.2 *Medicine and Health Care in Armenia in the 4th- 9th Centuries*

The adoption of Christianity in Armenia as a state religion was a turning point in the sphere of health care as well. The attitude towards the helpless and the sick (especially those with contagious and skin diseases who were neglected and rejected) changed significantly. Shelters and houses for the poor and the disadvantaged, hospitals and gathering places for lepers were built. All these activities were brought about by Christian love and charity. These places developed into health care institutions between 353 and 373 when Nerses the Great was the Patriarch. Pavstos Byuzand and Movses of

[18] ibid, p. 32
[19] A testimony of this shift is the Temple of Garni, the most significant historical monument of Hellenistic period in Armenia. It was built with an adjacent bathhouse, which had advanced sanitary functions.

Khorene, both 5th century historians, have described the situation in this sphere before Christianity, as well as before and after the reforms of Nerses the Great. Referring to Nerses the Great's preaching and exhortations to help the needy, Byuzand writes, "He is preaching to care for the poor, and treat their diseases by giving hope that the merciful would be rewarded by Christ. He was so influential that the people of Armenia would distribute their wealth and give it joyfully to the poor and needy".[20]

Special rules for administering hospitals and the houses for poor were adopted in 356 at the Council held in Ashtishat. Following this event, according to Byuzand, "They would search and find proper places to build houses for the poor, shelters for the sick, the lepers, the disabled, the epileptics. They decided to build lepers' houses that would provide food and treatment, and shelters for the poor. Because this was ordered by Nerses the Great and approved by the Council, the destitute were to stay in these shelters and not go out to beg, and every person was obliged to take care of them. It was important that the order of the world be respected. It was necessary that everyone be merciful, give them food, provide care and see to their needs. Thus they (the centers) were organised, constructed and founded."[21]

This evidence proves that the institutions founded by the regulations adopted at Astishat Council attempted to solve three issues simultaneously: *social, medical/health care and quarantine*.

It is worth mentioning that the establishment of similar institutions was typical of early Christianity and the newly converted Christians who, in the Apostolic Period, had

[20] Pawstos Byuzand (Pavstos of Byzantium 5th century), *History of Armenia*, by S. Malkhasyan, Yerevan, 1968, Book IV, Chapter 4.
[21] ibid

the prototype of protomartyr St. Stephen's (Acts 7. 60) service on the public table, which was later called diaconal service. It is not accidental that Byuzand writes that Nerses the Great "would remind people about the apostles who chose Great Protomartyr and protodeacon Stephen and his friends to care for the poor".[22]

Movses Khorenatsi also refers to this aspect of Nerses the Great's service juxtaposing them to similar realities existing throughout the Christian world. What he saw and experienced in Byzantium, he established in Armenia. Thus, in these centers was implemented the practice of Byzantium or Constantinople. He "called upon the bishops and lay people to establish canonical order to promote compassion and mercy. He eradicated the ruthlessness and cruelty whereby lepers were persecuted legally as unclean and would have to build their stone and thistle shelters in isolated places so that the infection would not be transmitted to others. They lived in misery and would not get any comfort or alms from anyone. Much in the same way, the disabled would not receive any care, nor would strangers be hosted and protected". He continued: "He ordered that in the isolated and uninhabited areas of every province, houses should be built for the poor and needy so that there would be consolation for physical sufferings. He attached to these hospitals towns and villages so that they would sustain them by their products".[23]

This was an innovative idea for the 4th century. The Patriarch had realized that those hospitals could not be maintained only by generous donations and there certainly had to be a steady income. He, therefore, allocated properties and farmhouses to supply the needs of the hospitals. The centers for the disabled were healthcare centers, which

[22] Ibid.
[23] Movses of Khorene, *History of Armenia*, Book III, Chapter 20.

also would provide free social services through the volunteer efforts of the clergy and people. There were those who committed sins and crimes and were sent to these hospitals for penitential purposes. This can be seen as the paradigm of modern community services.

Although no medical books written in the 5th century have survived, alternative sources, such as *The Canons of the Armenian Church* and the two major biologists, philosopher-theologians Yeznik of Kolb and David Anhaght (the Invincible) provide some valuable information, which describe the state of the medical science in Armenia. The sole fact, that already in the 5th century, immediately after the invention of the Armenian alphabet, along with the Bible and theological works, famous medical books were also translated from Greek, illustrates the importance and the advanced level of medicine in Armenia.[24] The works of ancient writers such as Plato, Aristotle, Hippocrates, Galen, Asclepiades and others were translated into Armenian through the efforts of representatives of the Hellenic School of translators and had a tremendous influence upon the outlook of medieval Armenian physicians. They studied the classical works of ancient medicine and used that perspective as a foundation for examining the achievements of medical science of the time.

The best document that indirectly explains the advanced level of medicine in Armenia in the 5th century is the book by Yeznik of Kolb called *The Refutation of the Sects*. The first part of the book is dedicated to the refutation of pagan religions "Against

[24] The medical books of Galen were not only translated but had a very practical application. A special dictionary, *The Words of Galen,* based on his works was created. Bark Galianosi, *The Greek-Armenian Dictionary to Galen*, Ed. by J. Greppin Delmar, New York, 1985. Thirty copies of this book exist in the Institute of Manuscripts in Yerevan (Armenia) speaking volumes of the importance of this book. Another proof that this book was extensively used from the 10th century on is evidenced by the inclusion of Arabic medical terms in the book.

the Pagan Sects," and the second, "Against Zoroastrianism," criticizes Persian Zoroastrianism. While speaking about the subjects related to Creation and universe, he touches the issues regarding biology and medicine. He analyzes the ancient theory of the four elements (earth, water, air, fire) and their corresponding four humors (blood, yellow bile, black bile and phlegm). He connects the appearance of illnesses with a disruption in the balance of the basic humors. However, in addition to the four humors, Yeznik takes into consideration the influence of external factors. In line with Hippocrates, he admits that the cause of every sickness is the violation of the balance between the four elements in the body; that is heat, coldness, dryness, and humidity.[25] He also provides us with an interesting account of the medicines indicating both the healing and the harmful nature of the same medicine depending on the way it is used: "There are illnesses", he writes, "which come about not because of sins, but because of an imbalanced nature of humors. Since man's body is composed of four elements... and thus if any one of them increases or decreases, the result is illness. To eat without consideration and in excess, to drink, to abstain severely, to work in excessive hot and cold weather and other conditions bad for the health".

He considered these factors of great significance in bringing about psychic and neurotic illnesses. Like Hippocrates, who rejected the "holy" nature of epilepsy, he too considered psychic illnesses the result of exhaustion of the brain. "As a result of exhaustion of the brain, man loses his consciousness, he speaks to the walls, argues with the wind. For that reason physicians insist that it is not the devil that enters man's body, those are illnesses of man which they can cure".[26]

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[25] Yeznik of Kolb, (5th century), *The Refutation of the Sects*, by S. Arevshatyan, Yerevan, 1970, p. 68

[26] ibid. p. 69

In the 5th century, along with Yeznik, there was another great philosopher-theologian, David the Invincible[27] [David Anhaght – 470s – 550s or 560s], who also wrote about the importance of medical science. He touched on subjects, which, by their moral and religious significance, had (and still have) a tremendous importance. Those were the issues of suicide and euthanasia (to receive a killing pill from the doctor). In accordance with his Christian faith he condemned any form of suicide. He referred to the specific passage in the Hippocratic Oath that forbids the doctor to prescribe a killing pill to the patient and if any doctor violates this rule he should be punished by God and be condemned to death penalty. It is obvious that David was familiar with the principles of Hippocratic medicine. In his works *Definitions of Philosophy*, *Interpretation of Aristotle's Analytics*, *Commentary on Porphyry's Isagoge*, and *Commentary on Aristotle's Categories*, he discusses the questions of anatomy, biology, pharmacology, hygiene and medical ethics. Being very well acquainted with the practice of dissections on man and animals in the medical school of Alexandria, he writes: "The function of analysis is to separate a substance into the parts of which it is composed. For example, when one takes the body of a man dissects the feet, hands, and head and then separates the body into bones, muscles, blood vessels and nerves".[28]

1.3 *The Rise and Advancement of the Armenian Medical Science in the 10-14th Centuries*

After the bloody wars of the previous centuries, the first half of the 10th century was marked by a period of relative peace in Armenia, known as the time of "*100 Years*

[27] see *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/entries/david/
[28] *Davit Anhakht, (David the Invincible 5th Century)*, *Philosophical Writings*, by S. Arevshatyan, Yerevan, 1980, p. 72. See also G. Grigoryan, *A New Evidence of the Practice of Dissection in Medieval Armenia*, Banber Matenadarani, 1962, vol. 6.

of Peace". The Armenian Kingdom of Bagratids, with its capital Ani, marks the period of prosperity and growth. It becomes not only, the political center, but also the booming hub of arts and culture, science and education including the medical science. As we saw in the previous chapter, the accounts on medical science were indirectly referred to, not in the special medical books but in the writings of various theologians and philosophers. However, it is in this period that medical books ***(bzheshkaran***) first appeared. They were dedicated to original studies on problems of pathology, therapy and pharmacology. Ani was very famous for its hospitals, pharmacies, health centers, baths and water system and this environment laid a very fertile ground for creating medical books and guidelines[29].

Many Armenian philosophers displayed great interest in natural sciences, especially Hovhannes Sarkavag (1045-1129) who lectured at various schools of higher education (i.e. universities). It is important to highlight that this marks the beginning of the period when the tendencies of the *Armenian Renaissance* are expressed and the separation of science from religion and the necessity for the experimental study of nature are advocated. Sarkavag writes that "the researcher must not only have an all-around education and knowledge, he must not only know the Bible but also the secular sciences. Even if he completely masters all this, just the same, he cannot be convinced of it without experiment. It is only experiment that makes facts firm and irrefutable"[30]. These innovative ideas of Armenian philosophers preceded those of their counterparts from the European Renaissance and especially

[29] See Stella Vardanyan, *History of Armenian Medicine*, pp. 20-21
[30] ibid. p.22

the well-known thesis of Roger Bacon (1214-1292).[31] The beginning of *Armenian Renaissance* in the field of medicine is reflected, rather completely, in the works of Grigor Magistros (980-1037), a contemporary of Ibn Sina (Avicenna).[32] Magistros had a profound knowledge of medicine and was well acquainted with the works of Plato, Hippocrates, Galen, Asclepiades, and Nemesius of Emesa. He considered himself to be the successor of the latter. Grigor Magistros was not only fascinated by theoretical questions on medicine, he was also a skilled practical physician. In his letter to the dean of a monastery, he wrote about the disease of the last king of the Bagratid Dynasty. In other letters he described smallpox, an ailment that had afflicted his own son, or gave sensible instructions to a priest who suffered from liver illness. Thus, we see in Grigor Magistros an experienced physician with fine professional sensitivity, well versed in clinical medicine and especially in phytotherapy. He advised one of his correspondents who were suffering from liver disease, to use lettuce seeds: "if the shell of the seed is white, it brings about weakness which induces sleep. Often, if it is put on the wound, it has a soothing effect on the patient who has fever. If its seed is mixed with saffron and put on the patient's forehead, it reduces the inflammation of the burning wound. There are many other sorts of lettuce which we believe are helpful not only to patients suffering from fever".[33]

[31] ibid.pp.19-20

[32] Grigor Magistros Pahlavuni (990-1058), a scholar, well acquainted with ancient culture in all its various aspects, displayed his abilities in different branches of Armenian culture as a poet, a philosopher and a physician. He also was army commander who very often had to take up his arms to defend the country. He had close ties with scientists and statesmen of Armenia and Byzantine as well. For more extensive information on Grigor Magistros see V.K.Chaloyan, *History of Armenian Philosophy*, Yerevan, 1959, *Grand Soviet Encyclopedia*, Third Edition, Moscow, 1974, also *The Letters of Grigor Magistros*, by K Kostaniants, Alexandrapole, 1910.

[33] *The Letters of Grigor Magistros* (10-11th century) by K. Kostanyan, Alexandrapole, 1910, p. 70.

1.4 *The Definition of Sickness and the Model of the Doctor in Medieval Armenia*

The perception of medical science and the degree of its development is well documented in the books of the Armenian medieval historians and in the writings of Armenian doctors. The question of the origin of sickness in medieval perception is best illustrated in the passages of the commentaries of the Gospels related to the healings by Jesus. The general understanding was that the physical healing is always examined in the light of spiritual healing and remission of sins. The foundation of such a world view is the fundamental Christian understanding of original sin as the cause for sickness and death. Therefore, it was very important to analyze the concept of sickness both from the natural science point of view as well as from the theological perspective. However, before presenting the issue in the interpretation of the Gospels, the moral code of the medieval doctor must be examined.

The last chapter of this thesis will elaborate upon the understanding of sickness, its cause and effects in its theological, social, and medical dimensions within the general context of Armenian Medieval literature. Therefore, at this point, it is important to give only the account of the historical background of the development of Armenian medical science and practices.

The Hippocratic Oath defines a doctor. However, as in other areas of ancient science and philosophy, Christianity has infused a new dimension and interpretation. It reintroduced a new concept of the moral understanding of the doctor. There were two very essential aspects:

a) Just as sickness had two sides - physical and spiritual sense of medicine, it had to be cured with natural scientific means and with spiritual confession, repentance and absolution of sins, also questioning the limitations of the doctor.

b) While in the ancient world the unconditional service of the doctor was an important factor in curing ailments, in the Middle Ages it gained a new spiritual sense. Medicine was not only seen as implementation of scientific means but also it was perceived as a channel to convey the grace. The approach was based on the words of Jesus "Freely you have received, freely give" (see Matthew 10:8), which has become a condition for the doctors to practice and impart that grace, free of charge and not become traders of the grace.

Although it has to be noted, that the moral code of the doctor in the Armenian milieu had its peculiarities, it essentially had deep roots with the general thinking and system of values of universal Christianity.

The issues related to medicine and sicknesses were very extensively and comprehensively discussed in the Gospel commentaries of the 13-15th centuries. One of the church fathers of the 12th century in Cilician Armenia, Sargis Kund, in his Interpretation of the Gospel of Luke, writes that in Christ's ministry of preaching and healing, His words and deeds are inseparable.[34] The perception was that the healing appeals to all the layers of the society regardless of their social status or political orientation. Medical aid should be provided to all those who are in need. Although, it is difficult to find or know whether there was a system in place to provide the necessary aid to all the segments of society, it is obvious that in medieval Armenia it was believed that

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[34] *Sargis Kund, Commentary on the Gospel of Luke, by Bishop Yeznik Petrosyan, Eychmiadzin, 2005, p. 199.*

medical support and cure had to be socially affordable and available especially for the poor stratum of society.[35]

The perception that medicine has to have a social inclination is very much manifested in the Commentary of the Gospel according to St. Matthew by one of the famous Armenian Patriarchs Nerses Snorhali (St. Nerses the Gracefull c.1101-1173). It occupies a very important and significant place in the Armenian medieval theological literature.[36] Commenting on “and great crowds followed him” (Mt. 4:25) the Patriarch states that it refers to all, without discrimination or segregation and embraces everyone. It is also interesting to note that he adheres to the reasoning of the ancient physicians and philosophers that the cause of every sickness is due to imbalance of the four elements that compose the human nature. The Patriarch repeatedly stresses the fact that the healing performed by Jesus was simultaneously both for the body and soul; the visible physical and the invisible spiritual healing.[37]

It is worth noting that already by the 14-15th centuries the Church had very extensively preached that medicine had to have a social dimension specifically for the poor.[38]

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[35] Ibid. p 211, p. 315

[36] Nerses Shnorhali, Hovhannes Yerznkatsi, *Commentary on the Holy Gospel according to St. Matthew*, Constantinople, 1825, p.85.

[37] Ibid, pp. 85, 189, 339-340. See also Barsegh of Mashkevor who develops the same perception that the healing should be physical, as well as spiritual; otherwise it will not be complete. See Barsegh John, *Commentary on the Holy Gospel According to St. Mark*, Constantinople, 1826, p.450

[38] The most eloquent account is articulated by one of the theologians of the 14th century Gregory of Tatev, while commenting on the passage of John 5:3 ‘In these lay a great multitude of impotent folk, of blind, halt, withered, waiting for the moving of the water’ he mentions that there were people at the pool with several diseases who had no means for medical treatment. See Gregory of Tatev, *Commentary on the Gospel of John*, by Fr. Ghukas Zackaryan, Etchmiadzin, 2005, p. 226.

In the Middle Ages the social dimension of medicine was strongly propagated and the moral codex and the integrity of the doctor were highly valued. Besides their medical knowledge, the doctors were specifically respected for their work ethics and morality. In this respect, one of the most significant criteria for the morality of the doctor was that he practiced free of charge for the poor, illustrating that the doctor's moral obligation had priority over his professional duties.[39] Many examples and stories of the doctor's moral conduct are apparent in the introductions, as well as in the epilogues of the medical literature of Middle Ages. These writings serve as guidelines for the doctors, profoundly expressing the common perception of the doctoral image and calling. The most valuable information of this nature is found in the writings of prominent medieval Armenian doctors whose books are regarded as medical encyclopaedias.

The 12th century doctor Mkhitar Heratsi (Mkhitar of Her 1120-1200) in Relief of Fevers raises questions, which speak to this social dimensions of medicine.[40] It is particularly obvious in the language that he uses, that his book is not written in the classical language but rather in the colloquial modern spoken vernacular dialect making the work readily accessible to a wider public and to all segments of society.[41]

The book is by no means an exhaustive scientific approach. It focuses primarily on being a functional and practical tool and was written as a guide for doctors. It was also an informative sourcebook that helped comfort the patient. By writing this handbook

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[39] The inspiration for such practice was the story of two doctor brothers Kozmas and Damianos who were treating people without charging them any fees. See *Haysmavurck, (Life of the Saints)*, Constantinople, 1730, p.149. See also, St. Melick-Bakhshyan, *The Worship Places of Armenia*, Yerevan, 2009, pp. 22, 125.
[40] Mkhitar Heratsi was a physician and a natural-scientific researcher with broad interests. The testimony of this is the mere mentioning of the subjects that he touches such as *On the Structure and Origin of the Eye, On Hernia, On Precious Stones, Predictions of Storms and Earthquakes*, etc.
[41] One of the indications regarding the social orientation of this book is the fact that it was written by the highest order and patronage of Patriarch Grigor Tgha (1173-1193), that it enjoyed the greatest support and encouragement of the Church authorities.

about fever, Mkhitar intended to reach a larger group of people. The core idea was to educate society about fevers, which were the most common indication of illness and the cause for other diseases. It is also explained that all other illnesses have local effect on the body, whereas fever encompasses the whole body and begins from the heart and through veins effuses into the entire body.[42] The Relief of Fever affirms him as a great scientist. His approach to the essence of fever-causing factors resulted in his unique, theory of "moldiness", which explained also the origin of tumors. Besides the external etiological factors, for the first time in medicine he suggested a new idea of "mold" as a living factor. Levon Hovhannissian, a prominent scholar in the history of Armenian medicine, writes: "It is an irrefutable, objective fact that up to the pre-microbiological period, no physician ever used such a term to describe the essence of infection, one so close to the truth, as did Mkhitar Heratsi".[43] Heratsi classified fevers into ***a)"one-day", b) "moldy" and c) "wasting"(consumptive)*** fevers. He was guided by intuition when he separated one-day fevers, which do not fit within the limits of humoral pathology. To explain their pathogenesis he referred to the pneumatic theory of ancient authors. This serves as a basis for us to suppose that in the one-day fever group, he described a few kinds of allergies (physical, chemical, neurophysical). In the "moldy" fever group he included a number of contagious diseases widespread in the Middle Ages (malaria, typhoid fever and septic diseases, the plague, small-pox, measles). The extensive experience of Mekhitar enabled him to clarify the moldy nature of fever particularly that of typhoid fever, considered to be highly contagious. He states that "if the patient suffers much from high temperature and moves uncomfortably from side to side, if his belly

[42] Bzhshkapet (Head doctor) Mkhitar Heratsi, *Relief of Fevers*, Venice, 1832, Epilogue, see also http://titus.uni-frankfurt.de/texte/etcs/arm/heraci/herac.htm (accessed at August 5, 2012)
[43] Mxitar Geratsi, *Uteshenie pri lixoradkax*, by Levon Oganesyan, Yerevan, 1955, p. 83.

swells and if at a percussion, a tympanic sound is heard, you may be sure that he will die, especially if there are black dots on his body as large as sumac. People should stay away from him and not come in contact with him".[44] It was later, in the 16th century that in European science the famous Italian physician Girolamo Fracastoro developed these ideas in his work On Infection, Infectious Diseases and their Treatment (1546).[45]

As for the wasting (consumptive) fevers corresponding to the different clinical forms of tuberculosis, they are brought about by emotional disturbances, over-exhaustion, malnutrition, and unfavorable climatic condition. These are factors which, even today, medicine considers of great significance in the pathogenesis of tuberculosis. The description of symptoms and the course of fevers are a testimony to Mkhitar's brilliance and wisdom as a physician. He had mastered the different methods of examining the patient (these methods are still used in medicine today - examination, palpation, percussion, auscultation). Heratsi placed great importance on taking the patient's pulse, determining the temperature, and analysis of the mucous, urine and other discharges. He approached the disease from a dialectical perspective dividing it into four stages. He advised physicians to have an individual approach to each patient, taking into consideration the course of the disease and its stages and accordingly foretell its outcome. Heratsi used the experimental approach often contrary to scholastic practice. He developed a complex system of cures based on the use of medicines, especially herbs, as well as dietetic and physical methods. He considered phytotherapy the most important, based on Armenian folk medicine and on the experience of ancient and eastern

[44] Bzhshkapet (head doctor) Mkhitar Heratsi, *Relief of Fevers*, Venice, 1832, p.122
[45] see http://encyclopedia2.thefreedictionary.com/Fracastoro (accessed at 5 August, 2012)

medicine.[46] In 1908 Ernest Seidel, who translated the Relief of Fevers into German, states: "For example, when we, without prejudice, compare Hildegard's "Physics", which was written a few decades before, with that of the Armenian master, we are compelled to definitely grant the laurel of the first place to Heratsi for having basically known nature, for his consistent and individual thinking and for being completely free of the yoke of scholasticism".[47]

In the 12th century, in all medical books, there is a directive to doctors regarding the consideration of conditions of the patient while undergoing treatment. The last chapter of Mkhitar's book is dedicated to this issue and entitled, *What Conditions Should the Doctor Consider in Treating the Sick.* It is fascinating to see the perception and approach of the doctor while encountering with the patient. There are ten points that play essential roles in the process before any diagnosis or any prescription.

1) The cause of pain and sickness.
2) The effects immediatly after the onset of illness.
3) Allergies etc.

[46] Mkhitar Heratsi suggested special diets for patients suffering from fever, which included mainly greens, vegetables and fruit, fresh and dried, juices and sweets prepared from them. Patients were advised to use coriander, basil, celery, okra, purslane and such fruit as pomegranate, quince, grapes, oleaster, figs, and jujube plums. He advised to give the patient easily-digestible food as fresh fish, chicken, meat broth, egg yolk, milk (for tubercular patients, goat and donkey milk was recommended). Among physical methods of treatment, Heratsi considered water therapy (shower, baths) as well as cold sponging and gymnastic exercises very important. He attached great importance to psychotherapeutic methods suggesting to use music for that purpose. Thus during "one-day" fever which, in his words, come about from "worries and bitter cares", he recommended the following: "Amuse (the patient) with games and jokes and in every way possible, make him gay. The patient should listen to the songs of gusans (minstrels) as much as he can, to the sounds of strings and delightful melodies". The oldest copy of *Relief of Fevers*, written in 1279 exists in the Yerevan Mashtots Matenadaran (codex 416). The study of this work reveals the high level of Armenian medicine during the time of Mkhitar Heratsi. All this truly places the Armenian master-doctor (***bzheshkapet***) among the first ranks of medieval physicians. See Stella Vardanyan, *History of Armenian Medicine*, pp.28-29

[47] Mechitar's des Meisteraztes aus Her « *Trost bei Fiebern* » aus den Mittelarmenischen ubersetzt von D-r med. Ernst Seidel, Leipzig, 1908, IV, p. 11. See also http://wwwcf.nlm.nih.gov/hmddirectory/directory/collections.cfm?id=42 (accessed as 5 August, 2012).

4) The physical conditions.

5) The age of the patient.

6) The peculiarities of the country and the weather.

7) Which season of the year the sickness occurred.

8) Information about the locality where the patient is from.

9) The patient's habits.

10) His strength and force.[48]

Notably the approach is more holistic and it is not confined only to the limits of making a diagnosis based on the illness itself, but rather the entire process of examination. The diagnosis, as well as, the treatment is analysed within the context of the social environment of the patient taking into consideration the first symptoms of the sickness, the patient's general physical condition, his age and habits, and the characteristics of the ecological environment of the place where the patient lives.

The 13-14th centuries marked the unprecedented increase of the schools of higher education (universities) in historical Armenia. The foundation of natural sciences and medicine were taught in various large scientific centers based on ancient traditions. It was during this period when the works of a number of prominent scientists of medieval Europe were translated from Latin to Armenian, such as those of Albert the Great (1193-1280) the famous theologian, philosopher, botanist, zoologist and physician, and the theological and natural philosophical works of Thomas Aquinas (1225-1274). Although the theological and ideological-political thesis of Catholicism was firmly opposed by the Armenian theologians, the works of natural science and scientific origin were studied in

[48] See Bzhshkapet (head doctor) Mkhitar Heratsi, *Relief of Fevers*, Venice, 1832, p.143

higher educational institutions. It is fascinating to observe the level of broadmindedness of Armenian theologians who in the midst theological debates and controversies, were inclined towards the sciences and encouraged the students to study the books of scholastic fathers despite their strong opposition to Proselytism and Unitarianism.[49]

The collapse of the kingdom in Cilician Armenia at the end of the 14th century (1375) and the continual wars in the 15-16th centuries between Ottoman Turkey and Persia to divide Armenia resulted in the decline of Armenian culture. Despite those severely difficult years the classical traditions of "*Armenian Renaissance*" in medicine were still preserved in some cultural centers. The last brilliant manifestation was the works of the prominent physician Amirdovlat Amasiatsi [c. 1420-1496] in the 15th century.[50] He was the successor of the Cilician medical school of thought, who continued the work and tradition of the previous period. His books[51] have not lost their relevance even for today. He draws and highlights very comprehensively the importance of the doctor's calling, integrity, doctor-patient relationship and description of the sicknesses. The fundamental problems of medicine are expressed in his works. He demonstrates a broad and profound scientific knowledge. He freely and correctly uses and advises on the use of a vast variety of medical plants, which proves him to be not only a needed physician but also highlights his profound knowledge in biology, zoology and chemistry.

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[49] See Stella Vardanyan, *History of Armenian Medicine*, pp. 38-39

[50] The decade of his lifetime when these valuable works were created, was at the same time full of dramatic events in his personal life. He himself testifies about the hardships he had been through: "I have suffered many difficulties and hardships at the hands of infidels and foreigners, judges, kings and princes. For many long years I have been in exile. I have seen good and evil, I have met with adversities, I have known riches and poverty. I have wandered from land to land and practiced my medicine, have used drugs according to my knowledge. I have served the sick noblemen and rulers, military men of different ranks, citizens and paupers, the aged and the young". See Amirdovlat Amasiatsi, *The Study of Medicine*, by St. Malkhasyants, Yerevan, 1940, Epilogue

[51] *Usumn Bzhshkutyan* (The Study of Medicine), *Akhrapatin* (Pharmacology), *Girk Ramkakan* (Popular handbook), *Ogutn Bzhshkutyan* (The Benefits of Medicine) *Angitats Anpet* (No Use to the Ignorant), *Vasn Nshanats Hivantin, Zgenats yev Zmahun* (On the Patient's Signs of Life & Death) etc.

He made his significant contribution to medieval medicine, creating a whole library of medical works, written in the medieval Armenian vernacular making it accessible to the people. In the works of Amasiatsi almost all important branches of medicine are presented (embryology, anatomy, physiology, clinical medicine, pharmacology, surgery and therapy) and have served for centuries as a medical encyclopedia.[52]

His book, The Benefits of Medicine, can be compared to some of the best works of his contemporaries. It contains the knowledge of medieval Armenian physicians on theoretical and practical issues. The section on clinical medicine is of particular value. Exhaustive descriptions of more than 200 diseases are given, complete with methods of therapeutic and nutritional treatments of internal organs. These include diseases of the brain, heart, respiratory organs, liver, stomach, intestines, urogenital organs as well as the nervous system, senses, fevers, malignant and non-malignant tumors, poisoning.[53]

In the preface of his The Study of Medicine he underlines the four principles to which every doctor should adhere:

1) Establish the cause of the sickness.
2) Determine the root of the pain and understand the symptoms of the disease.
3) Begin the treatment based on the above-mentioned two points so that the sickness gradually heals, the body gets its strength back and health is restored.
4) Whatever the doctor says the patient should respect and abide.[54]

[52] see See Stella Vardanyan, *History of Armenian Medicine*, pp. 40-43.
[53] Ibid. p. 44
[54] Ibid. p. 6-7

Amirdovlat, with a deep understanding of the physician's duty, emphasizes that it is equally important for a doctor to have scientific knowledge, but he must exercise high ethical and moral standards. He often expresses the principles of medical ethics: "The physician must be endowed with intellect and a sense of duty. Under no circumstances may he be fond of drinking, be neither greedy nor self-interested. He must like the poor, be merciful, devoted, pious and morally clean. If he cannot understand the essence of the disease, he must not give the patient medicine to not bring shame on himself. If he is ignorant, then it is better not to have him visit the patient and generally speaking, he must not be considered a physician… Not only (the doctor) has to have the knowledge but he should not be treacherous and malicious. He must be a consoler and not a money-lover and should not ignore the poor, but treat them in the name of God".[55]

He talks about the important role of the family doctor. His duty is not only to look after the patient but to care for the entire family and advise them on their lifestyle. The family doctor should be privy to the family situation and assume substantial rights in treating the patients while observing confidentiality.[56] This notion was a very liberal approach for medieval times in a closed oriental system where a non-family male member could have an intimate connection with the family.

Amirdovlat's Useless for the Ignorants is an encyclopedia of medieval Armenian

[55] Ibid p.18. One of the beautiful allegories he portrays is the resemblance of the human body to a city. He likens the body to a city, with human nature as the king of that city; whilst pain and sickness are depicted as the adversaries who want to destroy it. Thus, medication is the equivalent of fighting soldiers. The doctor who prescribes the medication is the commander-in-chief. Just as the commander assesses the situation, taking into consideration all possible scenarios, then chooses the right moment to attack the enemy, so too does the doctor. Also, just as an enemy has to be confronted with the appropriate arms, the doctor has to evaluate the degree of the illness and select the proper medicine to control it.

[56] He compares the doctor with father confessors. The patient has to tell the doctor about his illness without hiding anything, just as the sins are confessed and told to the priest. The doctor has to keep it confidential, as does the priest. Ibid. p. 22

pharmacology. It contains the names of medicines given in five languages: Armenian, Greek, Latin, Arabic and Persian, 3500 names and synonyms of more than 1000 medicinal plants, 250 animals and 150 minerals. Contemporary studies of this work confirm that there existed a well-developed school of Armenian medicine in the Middle Ages particularly in the field of phytotherapy, which was the main field of medical practice.[57]

Although, the doctor should have a proper education and knowledge, field practice plays a very important role in medical training. This *modus operandi* continues in the 17th century by Bouniat of Sivaz who was one of the well-known educators in the Armenian Medical School of Sivas (Sebastia)[58]. In the epilogue of one of the reproductions of the writings of Amirdovlat of Amasia, which was ordered by Bouniat, he gives two important counsels; one to the patients and the other to doctors. In the message to the sick, he states that it is essential not to be obsessed with leisure and abuse food consumption. Careless living, covetousness and gluttony cause death, while those who are careful and pay attention to their food may increase the number of years of life. The patients should honour the doctors, for their health depends on them; but the cure is

[57] Amirdovlat Amasiatsi, *The Usless for the Ignorants or Dictionary of Pharmacology*, by K. Basmajian, Vienna, 1926. As Stella Vardanyan mentions to "cure all those diseases, in the cause of which, based on data today, the contagious-allergic factor plays a definite role, he used such herbs as *cowparsnip, inula, camomile, mugwort, hyssop, thyme, sweetflag,* black cumin, caltrops, pearl-plant, all native to Armenian plant life. All these herbs were rich in either oils, vitamins, plant hormones and other substances which made for their curative influence. By means of the same experimental methods, he revealed the anti-tumor properties of hog's fennel, field eryngo, red periwinkle, heliotrope, meadow saffron and certain other plants. According to present data, they contain coumarin and furocoumarin derivatives as well as the alcaloids colchicine and vinblastin which have antitumoral influence. Amirdovlat attached great significance to those herbs which had antitoxic (lavender, marigold, ironwort) and tonus-raising properties (birth-wort, snake bryony). Amirdovlat used most of the above-mentioned plants to prevent premature ageing and to maintain good health and vitality. For the same purpose he used some gums of plant, animal and inorganic". See Vardanyan, *The Medicine in Ancient and Medieval Armenia*, Yerevan, 1992, pp. 48-49

[58] Amirdovlat created a school of Armenian phytotherapeutists, which existed for a few centuries and the traces of whose influence can be noted in the works of such representatives of the Sebastian medical school as Hovasap, Asar and Bouniat Sebastatsi.

in the hand of the Almighty. Bouniat, while recognizing the significance and importance of medical knowledge as the means to heal the sick through the doctor, believes that since medicine is associated with life, its final healing is through the grace of God. In his advice to the doctors he underlines some important attributes that a physician must have:

1) Whoever wants to become a doctor should, first become a student and have appropriate training.

2) The perfect doctor should have the knowledge of medications.

3) Has to be morally sound, wise, insightful, a counsellor, not a drunkard nor avaricious. He has to love the poor, be merciful, devoted, faithful, God-lover and holy.

According to Buniat, there is no greater subject to study than medicine because the work of the physician is constantly related to the health of the human being who is the best and highest creation of God. Therefore, doctors deal with the crown jewel of God's creation. He follows the traditions of the ancient world that the healthy soul is in the healthy body. Bouniat speaks about the importance of the perfect balance between the body and soul: "***the one who is not healthy physically cannot serve God***". The doctor is the mediator between God and the sick, through whose service the cure is provided: "The grace for healing should be from up High so that the honourable doctor is able to offer the right medication…for the sick; God is the medicine, who is the Lord of life and death".[59]

[59] Bouniat of Sebastia, *Book of Medicine*, (17th century) by D. Karapetyan, Yerevan, 1987, p.59

1.5 *Conclusion*

In this chapter I have attempted to present a brief but comprehensive outline of the rich historical background of the history of medical science in Armenia, from pre-Christian era up to the medieval period, as well as, to explore its moral, ethical and social dimension. I have avoided illustrating the extensive account of Armenian medicine in its entirety and have based my analysis only on a few aspects of folk medicine and its sources, the experience and knowledge of many generations of Armenian physicians. The purpose of this chapter was to present and demonstrate the achievements of Armenia in the medical field, and illustrate the advancement of medical science in Armenia and the contribution of Armenia or Armenians towards the global advancement of medical science. I have not included the various higher educational schools of different regions of Armenia, which during certain periods of time have been scientific and educational centres where Medical Science also was taught and practiced. This does not include the history of medicine from 17th century onward when Armenian culture was in decline as a consequence of continuous wars and foreign domination, yet there were some individuals and schools that continued forging forward the glorious practices of the past, specifically in the field of medicine.

This chapter serves as a foundation for my main analysis of the current state of the Healthcare System of Armenia. It outlines the ethical, as well as, theological understanding of medicine and medical science which can become both a rich source in the modern system of the health care and a criterion for the code of conduct of present day physicians. It is very important to examine the achievements of the past including the perception that they had regarding doctor-patient relationship, doctor's moral duties and

responsibilities, a socially just system, affordable and universally applicable health system. In today's society one of the most challenging issues in the realm of health care is the just and right allocation of resources, which has become one of the burning issues in developed, developing and third world countries alike. The issue existed even in the 4th century with the establishment of hospitals, care centers, and the houses for the poor. The concern, therefore, is ever existing and a difficult one, which still requires adequate solutions. With the fast growing global population and increasing global challenges, it will be extremely hard to find a just and comprehensive solution. Therefore, the challenge is to create alternative financial sources which would sustain the economic health of the system. The next chapter will present and evaluate the state and trends of health care, as well as, the comprehensive reform program implemented in Armenia. It will deal with the challenging issues of health care services, the impact of socio-economic factors, the principal of equality and corruption and will review the information, available sources, and materials concerning the results of reform that are to meet all the objectives of health care policy.

Chapter 2
The Modern Health Care System and Its Socio-Ethical Perspective

2.1 *Overview of the Healthcare System in Armenia*

The Republic of Armenia is a small, mountainous, landlocked country, covering 29,800 km^2 and bordered by Georgia in the north, Azerbaijan in the east, Turkey in the west, and Azerbaijan, Iran and Turkey in the south. The population density is 127 persons/km^2, with about 67% of the population urbanized and almost half living in the capital Yerevan. Administratively, the country is now divided into 11 regions ("marz"), while there were 37 administrative regions during Soviet era. Other than Yerevan, the remaining 10 regions are further subdivided into 931 communities.

The present Armenian state lies in the area, which historically was eastern Armenia. The region was dominated by Persians and Ottomans who fought over it for three centuries until it was taken over by the Russians in the early nineteenth century. In the nineteenth and twentieth centuries it became the battleground for Russians and Ottomans with disastrous consequences for the Armenian people. It is estimated that about 1.5 million persons died in the period of 1915–1922 as a result of forced relocation, famine, and the Ottoman genocide of Armenians. Following the Bolshevik revolution in 1918, eastern Armenia became an independent state, and hopes were raised that Armenian sovereignty over parts of western Armenia could be established. However, this did not materialize due to the Turkish rejection of the 1920 Treaty of Sevres (in which the Allies recognized Armenian independence). After a series of regional conflicts, Armenia became part of the Soviet Union in November 1920. While initially it was part of a Transcaucasian Federation of Soviet Republics, in 1936 it became a Soviet Republic in

its own right[60].

The dramatic events following the break-up of the Soviet Union affected the healthcare system as well as all aspects of the society in all 15 republics.[61] The former Soviet Union republics had a highly centralized and well-organized healthcare system with a large number of well-trained healthcare professionals. One of the greatest shocks for the management of the system was the hierarchical separation from Moscow resulting in supply-chain disruption, negatively impacting the provision of equipment, supplies and particularly drugs.

Until 1991, budgets were centrally determined. Healthcare facilities were given a fixed amount of money based on the number of beds in hospitals and the number of visits to the primary health care facilities (policlinics and rural health care posts). The country had inherited a vertically centralized health care system providing free of charge services as part of a planned budget. The provided services were reimbursed based on visit reporting rather than health care service quality indicators. Given the fact that

[60] See *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, p.1 (accessed at June 2, 2012)

[61] In December 1991, US Secretary of State James Baker requested that humanitarian and other forms of aid to the new independent states of the former Soviet Union be organized and coordinated. As a result, a coordinating conference was held in Washington in January 1992 and attended by representatives of more than 50 countries. Five working groups were established for food, shelter, energy, medicine and technical assistance. A delegation was formed that consisted of some 30 health care professionals representing 14 countries and international organizations. Ten republics were visited during the period of February 27 to March 31, 1992, to survey firsthand the medical and other health care needs of the new republics and to formulate recommendations based on the following four points of the action plan determined at the January 1992 conference:

- Emergency medical needs;
- Developing international health care partnership
- Assessing pharmaceutical manufacture, vaccines and medical supplies, and the possibility of private and joint ventures in the health care support area; and
- Technical assistance needs including help with management and financial planning (see http://www.state.gov/r/pa/ei/bgn/5275.htm), (accessed at June 3, 2012)

Health Care in Armenia Today, Richard Farmer, MD, Aram V. Chobanian MD, West J Med, 1994; 160:331-334. Medical Working Group: Experts Delegation to the New Independent States-Country Reports: Armenia. Washington AID, 1992).

funding was linked to the hospital bed occupancy rate, the institution was reimbursed as long as the hospital beds were reported as occupied. Thus, the focus was on inpatient care[62] to the detriment of all other services especially that of primary/preventive health care. This led to reduced out-clinic practices with very limited preventive health accessibility. As compared to the other republics, Armenia suffered severely in the aftermath of the collapse of the Soviet Union. Several incidents harshly affected Armenian reality, negatively impacting the society as a whole, with health services access being the centerpiece of the crisis. Besides the very rigidly centralized economic breakdown, the newly independent country Armenia had to deal with and cope with the devastating earthquake of 1988 (according to some estimates, both official and unofficial, at least 35,000 people died with some reports reaching as high as 60,000 deaths), and the war with Azerbaijan to protect the rights of the Armenian population of the Armenian enclave of Nagorno Kharabagh[63]. Moreover, as a result of the war there were over 400,000 refugees who fled from Azerbaijan. Armenia, already a landlocked country, was now locked out with no safe and open borders due to the total blockade by Turkey and Azerbaijan, constant wars in Georgia and the instability in Iran. The situation prevented most truck and rail passage to and from Armenia. To further complicate matters, Armenia had to deal with unforgiving winters, lack of electricity and heating, scarcity of food, the quality of drinking water and supplies. These combined with various social

[62] This is still the case and needs to be improved given the fact of the scarcity of resources as well as corruption risks the focus has to shift from in-patient to out-patient services. I will further elaborate on the issue under Organizational Ethics and Resource Allocation Section.

[63] Rich Vera*: Conflict Continues between Armenians and Azerbaijanis*. Nature 1988; V. 332; 6164, p.477, http://www.nature.com/nature/journal/v332/n6164/pdf/332477b0.pdf, (accessed at 20 June, 2012) see also Minorities at Risk Project, *Chronology for Armenians in Azerbaijan*, 2004, available at, http://www.unhcr.org/refworld/docid/469f3866c.html (accessed at 20 June 2012), (Refworld, The Leader in Refugee Decision Support)

determinants of health[64] including lack of housing, unemployment, etc. led to lack of access to basic health services making the needs of people of Armenia drop from top to bottom of the Maslow's hierarchy of needs[65]. Post-Earthquake long-term mortality and morbidity[66] and psychosocial impact[67] related damage estimates continued raising issues on the health system side for many years. The trauma caused by the earthquake gave rise to various diseases and conditions including tuberculosis, gastrointestinal tract infections, various other illnesses and malnutrition - particularly among children, leading to serious issues and problems[68]. The supply-chain bottlenecks', particularly those creating lack of medications/drugs presented the biggest challenge of all exacerbating the health services access barriers. All these factors combined with the threats of cold, hunger and war had put the country at the brink of collapse and brought the nation's focus on physical and biological needs only for many years. [69]

In summary, a number of issues stand out when depicting the healthcare system and

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[64] CSDH. *Closing the gap in a generation: health equity through action on the social determinants of health.* Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization, 2011. (http://www.who.int/social_determinants/thecommission/finalreport/en/index.html accessed at August 15, 2012)

[65] Maslow's Pyramid of Needs (http://www.businessballs.com/maslow.htm (accessed at May 6, 2012)

[66] Armenian HK, Melkonian AK, Hovanesian AP. Long Term Mortality and Morbidity Related to Degree of Damage Following the 1988 Earthquake in Armenia, Am J Epidemiol, 148(11):1077-1084;1998

[67] Armenian HK, Masahiro M, Melkonian AK, Hovanesian AP, Haroutunian N, Saigh PA, Akiskal K, Akiskal HS. *Risk Factors for Depression and Related Psychologic Sequelae in the Survivors of the 1988 Earthquake in Armenia*. J Urban Health 2002 Sept. (in press)

[68] *Dialysis for Acute Renal Failure Due to Crush Injuries After the Armenian Earthquake*, N. T. Richards, J. Tattersall, M. McCann, A. Samson, T. Mathias, A. Johnson; *BMJ 1989;298:443-445 doi:10.1136/bmj.298.6671.443 (18 February 1989)*, /Correction/ *BMJ 1989;298:655 doi:10.1136/bmj.298.6674.655 (11 March 1989)*

- see also Review: *SOUNDINGS: Music of the Mountains*, James Owen Drife *BMJ 2005;331:167 doi:10.1136/bmj.331.7509.167-a (14 July 2005)*,

- Clinical Review*: ABC of Conflict and Disaster: Natural Disasters* ; Anthony D Redmond, *BMJ 2005;330:1259-1261 doi:10.1136/bmj.330.7502.1259 (26 May 2005)*,
- Research Article*: Response of the South Manchester Accident Rescue Team to the Earthquake in Armenia and the Lockerbie Air Disaster*. A. D. Redmond *BMJ 1989;299:611-612 doi:10.1136/bmj.299.6699.611 (2 September 1989)*.

[69] *Maslow Pyramid of Needs* (http://www.businessballs.com/maslow.htm (accessed at May 6, 2012)

its general conditions that Armenia inherited after its independence. One such example is the excess of human resources, gigantic hospitals with large number of beds that have become a burden to the health system of post-Soviet Armenia.[70] Contrasted with deteriorated facilities/technologies and poor financial resources the health care service availability became scarce in largely physically available health care settings.[71,72,73,74,75] These factor of the disparities between urban and rural settings combined with the results of the earthquake, severe energy crisis, imposed war, economic collapse and poverty cumulatively led to a rapid decline in health and wellbeing indicators in the country.[76]

The above-mentioned introduction is the overall description of the socio-economic situation of the Republic of Armenia through its early years of Independence (1991-1995), which has since gradually normalized and seen many reforms in all segments of life, but most particularly in the healthcare system.

Despite the serious problems and hardships during the early independence years, the healthcare system and the quality of health care services has gone through many changes and has improved tremendously.[77] The Armenian diaspora [78],[79], as well as the

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[70] Hakobyan T et al. Armenia: Health System Review. *Health Systems in Transition*, 2006, 8(6):1–180 (http://www.euro.who.int/Document/E89732.pdf , (accessed at 12 August 2012).
[71] Health System Performance Assessment Working Group of the Republic of Armenia (ROA). *Health System Performance in Armenia: Strategic Review Summary*. 2008. Yerevan, Armenia
[72] Hawkins L, Ibraimova A. *Rapid Evaluation of the Course of Reforms in the Armenian Health System and an Analysis of the Possibilities of Restructuring the Ministry of Health*. Copenhagen, WHO Regional Office for Europe, 2008.
[73] *Country Health Systems Surveillance (CHeSS) Situation Analysis for Armenia*. Geneva, WHO, 2009.
[74]Feeley F et al. *How Great is the Burden of Household Health Expenditure in Armenia*. Yerevan, United States Aid for International Development (USAID) Primary Healthcare Reform Project, 2008.
[75] *Armenian National Programme of Health System Optimization in Marzes* Dated 2 November 2006. Yerevan, Government of Armenia, 2003 (Decree N1911)
[76] Data from National Statistical Services of Republic of Armenia (http://www.armstat.am/en/?nid=81&pthid=soc&year=&submit=Search (accessed at June 10, 2012)
[77] The *2010 Armenia Demographic and Health Survey* ADHS) (http://measuredhs.com/what-we-do/survey/survey-display-354.cfm accessed at July 10, 2012)

international community[80] have been assisting in these efforts by providing substantial expertise, material aid, modern technology and equipment. Thus, Armenia began reforming its health sector at an early stage following independence. The reforms included changes to health care delivery in the ambulatory and in-patient settings, as well as the financial and regulatory framework with the overall aim of enhancing efficiency and accessibility of the health care system. Below is the list of key reforms, which clearly indicate the range of development in Armenia implemented up to 2001, which lay the foundation and provide the vision of the health care system performance in the country;

In 1992 The Republic of Armenia signed one of the international health covenants, the "Convention of Children's Rights".

- 1992: Passage of the law on sanitary-epidemic safety for the population.
- 1994: The president signed the world declaration on "Children's Protection, Development and Welfare".
- 1995: Adoption of the "Program for Development and Reform of the Health Care System of the Republic of Armenia 1996–2000", identifying management, infrastructure, finance and education as main areas for reform.
- 1995: Adoption of the Armenian Constitution, which set out the right of individuals to health protection and affirmed that family, maternity and childhood are under the protection and patronage of society and state. It states "Every

[78]Victoria Minoian, Lev. Freinkman. (2005) *Armenia: What drives first movers and how can their efforts be scaled up?* In: MPRA Paper. *RePEc: pra: mprapa: 10010*. (http://info.worldbank.org/etools/docs/library/152388/victoriaminoian.pdf (accessed at August 15, 2012)
[79] Freinkman, Lev., 2000. "Role Of The Diasporas In Transition Economies: Lessons From Armenia," MPRA Paper 10013, University Library of Munich, Germany. (accessed at August 15, 2012)
[80] National health accounts: Armenia. 2004-2009. Geneva, World Health Organization (http://www.who.int/nha/country/arm/en/, accessed at August 15, 2012)

individual has the right to health protection. Medical aid and medical services are defined by the law. The state is responsible for public health protection programs, and subsidizes the development of sport and physical culture (Art. 38; 48-4,6,7)…"Family, maternity and childhood are under the protection and patronage of society and the state" (Art. 48-1).

- 1995-1996: Adoption of the Law on "Medical Aid and Medical Services to the Population".[81] The Law specified that:

"*Everybody has the right to receive medical aid and services free of charge within the framework of state health target programs, guaranteed by the State.*

Everybody has the right to receive medical aid and services beyond the framework of [state health target] programs at the expense of insurance compensation, personal payments and other sources, stipulated by the legislation of the Republic of Armenia".

The State is responsible for developing and implementing health programs to carry out its constitutional responsibilities to protect the population's health. Citizens have the right to choose their health care provider. Financing sources for health care services may include the state budget, insurance contributions, direct payments, and other sources not prohibited by law.

- 1997: Introduction of official user charges per governmental decree, which changed the former financing mechanism (sponsored 100% by the government) involving out-of-pocket for the majority of the population.
- 1997-2000: Introduction of the first state Basic Benefits Package. (BBP) and

[81] This Law became a turning point in that it effectively abolished the inherited system of health care financing by presenting the legal framework for introducing alternative means of health care financing including user charges.

consequently four government decrees were issued on the subject of priority services.

- 1997: A law on “Prevention of HIV/AIDS” by the National Assembly.
- 1998: Establishment of the State Health Agency (SHA) as purchaser of publicly financed health care services. Since January 1, 1999, the SHA has been the sole body in Armenia responsible for reimbursing health care providers.
- 1998: The first BBP was introduced with the support of World Bank loan.
- 1998: Law on pharmaceuticals adopted by the National Assembly addressing all aspects of the procurement and supply of pharmaceuticals in Armenia.
- 1999-2000: Adoption by the Government of the “Strategy of Health Care System Development in Armenia 2000–2003” outlining the long-term objectives and direction of further developing the health care system towards increasing access to services, improving organization, management and quality of care, promoting PHC (primary health care) and balancing social and market values in the health care sector.
- 2001: A draft law on medical insurance was prepared, involving both compulsory and supplementary voluntary insurance, intended to provide the organizational and legal basis for the establishment of the system.

There were also several new health policy documents developed, outlining the key objectives and the vision of the government to achieve goals for the health care system in Armenia. These documents include: “Health for All: National Approach, Health Policy Development in Armenia”, “The Concept of Introduction of Medical Insurance in the

Republic of Armenia", "The Concept of Privatization of Health Care Facilities", "The Concept of Optimization of the Health Care System in the Republic of Armenia".[82]

The health care system in Armenia consists of two main sectors 1) Public (governmental, non-governmental) and 2) Private. The public sector[83] includes; hospitals, hospital networks, policlinics, outpatient urban clinics, regional/rural health care facilities, state hygiene and anti-epidemic facilities, human resources development (medical university *www.ysmu.am* , nursing *colleges*, national institute of health *www.nih.am*, etc.). The private sector is comprised of hospitals, outpatient clinics/centers, dental clinics, pharmacies, alternative and non-traditional therapy centers, human resources development (universities, colleges, etc.).

It is undeniable that the success of reforms applied in Armenia should be evaluated against the improvements in the health status and the real impact on the life of the population. As a result, all the international and domestic surveys, information and reports show that despite the aim of the reforms to "bring tangible benefits to the whole population, their result, thus far, do not meet all the main objectives of national health care policy".[84]

Several reports and extensive analyses have been made and issued by renowned international health organizations such as World Health Organization (WHO), European

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[82]see, The Constitution of the Republic of Armenia, 05.07.1995, Chapter 2, http://www.parliament.am/legislation.php?sel=show&ID=1&lang=eng, (accessed at August10, 2012)*Health Systems in Transition; Armenia*, V. 8 No. 6 2006 pp. 17-18, www.euro.who.int/document/e73698.pdf, (accessed at August 10, 2012)*Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, pp. 71-73, (accessed at August 10, 2012), also Hasmik Harutyunyan, *Financing of the Health Care System in the Republic of Armenia in the Period of 1999-2000: Perspectives for Improvement*, Yerevan, 2003, pp. 23-28

[83] www.MOH.am, (accessed at August 10, 2012), http://www.pag.am (accessed at August 10, 2012)

[84] Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 34

Observatory on Health Care Systems (The Observatory) in collaboration with the Ministry of Health, Armenia, (MOH), National Institute of Health, Armenia (NIH) etc. During the earlier years specific areas of health system performance assessment focused on primary care reforms, optimization of hospital care, maternal, newborn and child care, whereas the recent assessments have examined the system as a whole, analyzing the entire system performance based on the three ultimate goals of a health system: better health, responsiveness and equity in financing.[85]

While acknowledging the vital importance of the findings of the reports with regards to the status of the current health care system in Armenia and the recommendations made for the improvement and more effective performance of the system, I believe, can be more productive and achieve its goal and objectives with a proper ethical and moral assessment. Armenia's health care system improvement goal, objectives and the process of reaching them have to be reviewed from social, ethical and theological standpoint. Thus, reflection on this subject will evolve while analysing the viability of health care responsiveness as it pertains to the needs of patients and the consequential impact of its accessibility.

Health Equity and Access – Barriers and Opportunities: Existing reports by international health and financing institutions provide evidence and information that raise numerous questions regarding the overall system, the sustainability of the reforms that took place in the past two decades, its sufficient performance, functioning and implementation. In spite of the documented explicit improvements, there are still

[85] *Health System Performance Assessment; Armenia, 2009*
http://www.euro.who.int/__data/assets/pdf_file/0020/103385/E92994.pdf (accessed at August 10, 2012).

multifaceted concerns mostly resulting from social, cultural (particularly inherited from the Soviet era) and economic challenges that Armenia faces today occuring since the start of its transition journey. The defining goal, the main and primary objective of a health system should be to better the health of the population, which is "understood to have two intrinsic, socially desirable goals: 'responsiveness' or 'goodness' (health system should respond well to what people expect of it), and 'fairness' (the response should be equal for all, no discrimination)".[86] Efforts should therefore be made to develop and enhance the perception that, for a socially viable and just system, three basic principles should be established that constitute the foundation and are aimed at providing better services by ***improving the health*** of the population and reducing health distribution inequalities, ***enhancing responsiveness***-respect and orientation, ***fair financing***-protect health on economic impoverishment due to need. However, productive functioning and implementation of a health care system is highly dependent, closely linked, and interconnected with the other sectors, components and factors of the society such as political, socio-economic, including financial growth and demographic data, correct and proper information, environmental, transportation, education, and culture. It requires close collaboration of all ministries and agencies involved in the policy and decision making process. It is obvious that without reform, change or restructure, health services and the whole socio-political framework of the health care system cannot be effective. Therefore, a more holistic approach has to be adopted. There are two main factors that significantly influence the efficient performance of the system;

1) *External* - poor economy, corruption, tax evasion, domestic risk factors,

[86] *Health System Performance Assessment; Armenia, 2009,* p. 20 see www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia (accessed at August 11, 2012).

2) *Internal*-accessibility - awareness, the sense of individual responsibility, behavioural and biological risk factors.

General conditions and external factors greatly affect the entire system. It is apparent and well-documented that countries such as Armenia that are in a transition period have suffered economic downfalls. The health care system needs strong government commitment, inter-sectorial cooperation, technical and financial support from the government as well as international organizations. In this respect the health care system has experienced a serious problem of imbalance between government income and the growing costs of health care. The fundamental issue lies in the difficulty of collecting tax revenues to sustain the budget. Also of concern is the ominous degree of corruption present at almost every level of society. One such example is the absence of regulatory legislation on the monopoly of drug and medication importing and distributing. As Dr. Irina Kazarian indicates, that there is a lack of "developed and approved strategies of implementation of Essential Drugs Concept, which is promoted by WHO as a basis of a National Medicines Policy that has been adopted in Armenia. As a result, when time comes to select medications, at any stage of drug management (procurement, donation, prescribing, etc.), the choice is based not on the approved 'list of medicines', but on interests and preferences of the person doing the selecting. Issues of transparency and accountability are also not covered by legislation and regulation".[87] Dr. Kazarian further elaborates as to what constitutes a good, accessible and affordable health system in relation to the pharmaceutical sector, which is the basic and core component in the system and essential for the health of the population. In the case of corrupt governance or lack of good governance commercialism takes precedence over the basic needs and rights

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[87] Kazarian (Gazaryan) Irina PHD, MSc, www.policy.hu/kazaryan/ (accessed at August 9, 2012).

of the population for sustainable health and health care, leading to the destructive stage. Dr. Kazarian identifies all the dangers and unethical practices that could paralyze the quality of the health care system. She observes that it "can be revealed in self-interested manipulation of the drug selection process, corruption in the award of tenders, nepotism in the appointment of key staff, health care staff selling drugs on the outside and many more. The results of unethical practices include reduced quality of health care, shortages of medically needed medicines and medical suppliers, unsafe and poor quality products on the market, financial losses for health systems due to irrational use of medicines through unethical promotion, and the undermining of public trust in science. Corruption is considered to be one of the main reasons of a National Medicines Policy failure"[88].

The second factor relates more to the general perception of the public towards health, which is a key element in future trends of health and health care. Due to prolonged transition, lack of public health education and access to it, extreme poverty and unemployment as well as the inherent nature of health care systems that are mostly centered on secondary rather than primary health services – there is a lack of self-care and valuing of self- health. [89],[90],[91] This is also a direct consequence of insufficient promotional and educational programs directed to raise awareness among the general

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[88] ibid

[89] American University of Armenia, Center for Health Services Research and Development, Needs Assessment: Primary Health Problems and Health Education Needs of Vulnerable Populations in Armenia/ PADCO Inc, ASTP Report # 81; 2002[published in English, funded by ASTP/PADCO Inc. USAID].

[90] Amirkhanyan Y, Demirchyan A, Petrosyan V, Harutyunyan T, Thompson M. *Knowledge, Attitudes, and Practices of Health Education Activities: Post-Intervention Evaluation among Patients of Selected PHC Facilities in Lori and Shirak Marzes*, USAID, 2008. *Primary Health Care Reform Project, Emerging Markets Group*, Ltd; American University of Armenia, Center for Health services Research and Development, 2010.

[91] Demirchyan A, Harutyunyan T, Petrosyan V, Thompson M. *Facility Resource Assessment: Baseline Assessment of Targeted Primary Health Care Facilities in Armavir, Ararat, and Aragatsotn Marzes*, USAID, 2008. *Primary Health Care Reform Project, Emerging Markets Group*, Ltd; American University of Armenia, Center for Health services Research and Development, 2010.

public about various areas of health related issues.[92] The extensive reports and findings of WHO discloses the present state of the society with regards to the behavioral and biological risk factors, health promotion, disease prevention. According to reports, there is a high percentage of tobacco and alcohol use, prevalence of being overweight, physical inactivity, high blood pressure, high cholesterol and glucose levels, low level of awareness of communicable disease risks and prevention means. Although the data show "that roughly half of the population is generally aware of the major risk factors and the level of awareness has increased"[93], there has been little change in promoting organized healthy lifestyle as part of the health system[94].

Another related concern is the impact of domestic risk factors, such as environmental-ecological issues with the growing mining sector, deforestation, air pollution, and uncontrolled dumpsites that affect the health of the population. These conditions affect tremendously the level of health and therefore have to be seriously examined and proper policy made to address the problem.[95] It is important to note that seeking health care service assistance ranks low within the public. Reasons vary with the 92.8% out of pocket expenditure[96] at the point of service access being on top of the list. Largely contradicting the Government's commitment to free service provision through

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[92] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf p. 43 (accessed at August 9, 2012)

[93] *Health System Performance Assessment; Armenia, 2009* pp. 108-121 see www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia (accessed at August 9, 2012)

[94] *Strengthening Health Services for School-age Children and Adolescents in Armenia*. Options and Opportunities. Bruce Dick, Marina Melkumova and Sergey Sargsyan. UNICEF 2010, http://www.unicef.org/armenia/resources.html (accessed at August 9, 2012)

[95] *Health Systems in Transition; Armenia, Vol. 8 No. 6 2006* pp. 9-13, see www.euro.who.int/document/e73698.pdf (accessed at August 9, 2012)

[96] Armenia is #32 in the list (http://www.globalhealthfacts.org/data/topic/map.aspx?ind=73#notes (accessed at August 12, 2012)

Basic Benefit Package, BBP[97], this figure for out of pocket expenditure stands for informal payment mechanisms by majority, including the poorest of the poor paying for the services provided by cash or in the form of gifts. The latter is known as an informal sub-culture in the health system and reveals a large ethical barrier to equitable access to health services. The list is further enhanced by unfriendly service providers, unavailability of medicine, and the general lack of trust in the system and the providers.[98] Thus, safety, acceptable quality and accessibility of the health care system remains hindered. These fundamental components have to be examined more closely and carefully and addressed appropriately based on the needs of the people, for more satisfactory and acceptable health outcomes. Therefore, it is essential to elevate the level of responsiveness of the system to coincide with the expectation of the people, which creates necessary outreach and accessibility for all segments of the society without considering their educational or financial background and capacity.

Ethical and Moral Perspective in Armenia's Modern Health System: Ultimately, to define the responsiveness of the system, the accessibility must be studied. Without equitable access to quality services leading to patient satisfaction, the system cannot be considered responsive. As per Universal Declaration on Bioethics and Human Rights (UNESCO)[99] the responsiveness is unquestionably linked to the four important domains of ethical considerations: a) Human dignity, b) Confidentiality, c) Communication d) Autonomy. Each of these domains have to be deliberated separately, however, always

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[97] http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_arm_en.pdf (accessed at May 16, 2012)
[98] According to data from the Living Conditions, Lifestyles and Health (LLH) Survey, undertaken in 2001 in eight countries that were part of the former Soviet Union, approximately two thirds of the respondents reported being rather or definitely dissatisfied with the health system in Armenia, with particularly high levels of dissatisfaction among those aged 50 years and older, at 70%. See *Health Systems in Transition; Armenia, V. 8 No. 6 2006 p* 40, see www.euro.who.int/document/e73698.pdf (accessed at August 9, 2012)

bearing in mind that they collectively lay the foundation for defining the health care system as responsive and therefore accessible.

The essential concern and the center of the system is the human being who should be considered through the theological and sociological lens. Therefore all undertakings, reforms or operations should reflect the various aspects of social viability and justice, human dignity and rights, responsibility, judgment and autonomy. Thus, the main and fundamental aspiration of a health care system is the human responsibility to create an environment where human dignity is respected and a sense of community is fostered. Professor Jamieson observes that:

> "In medical ethics, nothing is as important in decision-making as the autonomy of the patient or the patient's substitution maker, who speaks on behalf of the patient. Indeed, autonomy is considered sacrosanct among medical ethicists, bioethicists and as a result among clinicians, medical teams and research ethics committees. We witness in this a great respect for rights of the individual and, in fact, of the four principles of bioethics (the other three principles are non-maleficence, beneficence and justice) autonomy has the most moral weight. Yet, the dignity of the human person brings to the forefront something deeper and more pervasive than autonomy and human right. Dignity and responsibility are interrelated and they depend on each other. The dignity of the other calls me to responsibility. My intrinsic responsibility recognizes the dignity of the other".[100]

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[99]http://portal.unesco.org/en/ev.php-URL_ID=31058&URL_DO=DO_TOPIC&URL_SECTION=201.html (accessed at June 4, 2012)

[100] Christine Jamieson, PhD, *The Ethical Challenges of Medicine Today: Drawing on the Wisdom of Vatican II* (Paper presented in Lonergan workshop in Boston 2012. Publication is forth-coming.)

It is of absolute importance to recognize the significance and the value of each feature in physician-patient relationship, which begins on a basic level of primary health care. In its most decisive and fundamental perception, health care requires a commitment to and promotion for the patients' right to health. Health rights and human rights are interconnected, regarding a) **human dignity** (discrimination e.g. ethnic, racial, gender, political opinion, immigration status, respect specially for vulnerable groups denial of dignity, unethical research practices, lack of professional education etc.).[101] It is noteworthy that existing legislation and regulation, at least, formally protects patients' rights and freedom to b) **autonomy**, c) **confidentiality** and d) **communication** (receive appropriate care; be respected and supported while receiving treatment or service; be involved in all aspects of their care; be informed personally and, when appropriate, through their families about the outcome of care, resolving problems about care decisions, expect appropriate assessment and management of pain, discuss matters of concern related to the disease, etc.). However, as it is indicated in HIT Armenia 2006 reports "in reality these rights are only partly met and there is a concern that certain segments of the population are particularly vulnerable. Thus, the lack of awareness of rights to public services in health care makes patients more vulnerable to informal payments, denial of basic rights to free services, provision of state-funded services to non-beneficiaries, amongst others too numerous to list. Overall, and in view of the above-

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[101] These principles are generally reflected in the legislative framework and regulations. Unlike some other countries of the former Soviet Union such as the Russian Federation (1993) and Georgia (2000), the Republic of Armenia has so far not introduced any legislation or a specific charter addressing the rights of patients. However, as noted earlier, the Constitution provided for the basic right to the "preservation of health" (Article 34). *Health Systems in Transition; Armenia, V. 8 No. 6 2006* p 39, see www.euro.who.int/document/e73698.pdf (accessed at August 9, 2012)

mentioned, it is perhaps not surprising that satisfaction levels with the health care system are rather low".[102]

The other aspect that has to be promoted, developed, and enhanced is the society's involvement in the policy and decision-making process of health care. It is one of the necessary attributes in creating a civil society, which remains in its embryonic stage despite two decades of free and independent Armenia. It has to be mentioned that general public involvement should be in all aspects of social structure; politics, economy, health, environmental-ecological issues, culture, education etc. Without significant and strong public participation the formation of a civil society will remain a remote dream. The public has to be part of the decision-making process, thus assuming the responsibility for the social system that it creates. Understandably, this traditionally "passive" engagement is in part a reflection of the mentality and the culture imposed during the Soviet era, when the central government would decide and implement what is necessary for the society, "formally" asking the opinion or seeking the contribution of the people. Modern health care has to operate with a strategy that draws more public involvement. The public should be encouraged through social activism, NGOs, and mass media, to identify hindrances to the management of corruption risks and to the successful and effective execution and supervision of the reforms, policies and programs regarding its accountability, transparency, quality of service, accessibility and responsiveness. However, as it is correctly suggested by HIT (Health Systems in Transition); Armenia 2006 analysis, since the role of the Ministry of Health of Armenia has shifted from owner

[102] However, several measures have now been introduced to address this problem, involving the 2003 anti-corruption strategy and a timetable for the implementation of related activities. An example is the Government/UNDP strategy to combat corruption in the health and education sector through participatory monitoring, jointly approved in June 2005 and implemented in the framework of the UNDP-supported program to strengthen civil society in Armenia. ibid pp. 39-40

to regulatory state all the above-mentioned measures would not be sufficient “to enhance transparency in the health care sector. It will also require the State, using its own resources, to provide ongoing information through mass media, such as national television, as well as further developing its approaches to increasing public awareness of entitlements and obligations”.[103] In addition, the regulatory role of the government should always consist in striking the right balance between social and market value of the health care system.[104]

The next section will explore, in detail, the organizational ethics and resource allocation aspects of the health care system in Armenia. These are important aspects of the system in terms of viability, education, promotion, accessibility, responsiveness and affordability. One important observation has to be made that, although there is an urgency and constant planning, still implementation is required to improve health care in Armenia. According to some international organizations’ examinations and analyses “the high priority that the Government of Armenia assigned to health care over the last seven years (reports are 2009) makes Armenia stand out notably compared to other countries of the south Caucasus region, even though the fiscal situation of these countries is considerably more improved than that of Armenia”.[105]

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[103] ibid. 40

[104] Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 35.

[105] *Health System Performance Assessment; Armenia, 2009* p. 54, see www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia (accessed at August 9, 2012)

2.2 *Health Care Organizational Ethics*

Organizational ethics is concerned with the ethical and moral standards of any organization whether in healthcare, the corporate world or public service. It expresses the values and beliefs and sets the goals and methods of an organization and "it is the study and practice of the ethical behavior of organizations. It involves clarifying and evaluating the values embedded in organizational policies and practices, and seeking mechanisms for establishing morally acceptable values based practices and polices".[106] Health care organizational ethics by no means should be confused with clinical ethics, which is related to the issues of biomedicine or bioethics. It is rather the composition of business ethics and bioethics. In this respect "business ethics focuses on the choices of the individual in an organization, whereas organizational ethics focuses on the choices of the individual and the organization. Organizational ethics studies not only personal moral norms but also organizational moral norms as they apply to the activities and goals of an organization".[107]

The notion of organizational ethics has become one of the most dominant and essential components in health care, focusing on large scale issues such as governance/leadership/stewardship, management, reforms, the process of policy and decision-making, promotion, education, allocation and its just distribution of resources (both human and financial); the over-arching areas of accountability, deliverability and quality of service, social responsibility etc.[108] Since we live in the industrialized world,

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[106] *Implications of Organizational Ethics to Healthcare, by Carolyn Ells and Chris MacDonald* p. 33, http://www.ethicsweb.ca/files/organizational_ethics.pdf (accessed at August 11, 2012)

[107] *The Moral Ecology of Health Care Organizations* p. 16
http://media.wiley.com/product_data/excerpt/82/07879555/0787955582.pdf (accessed at August 11, 2012)
[108] The University of Toronto Joint Centre for Bioethics' published a study on "Clinical Ethicists'

there is a tendency to treat health care as a business entity. Therefore, unfortunately, health care organizations are seen as part of the big business world and oftentimes have to operate according to the standards and trends of corporate interests, sacrificing ethics. One of the dangers of modern health care organizations or the entire health care systems is:

> "The move toward industrialization. Health care organizations in the first part of the twentieth century were physician-dominated, guild-like systems that depended upon diagnosis and treatment of the patient as an individual. In the course of that century, health care organizations almost imperceptibly moved toward an industrialized model relying on population-based, statistical evidence to organize and provide health care predictably. This shift highlights two characteristics of the ecosystem to which moral analysis must attend. One is a move from domination by a medical professional to direction by a managerial professional. Another closely associated characteristic is the ascendancy of statistical, population-focused, and evidence-based health care, used to ensure predictable health outcomes and costs. These characteristics create the conditions for many organizational moral problems that health care institutions face. As they vest decision-making power in managerial professionals, who use the industrial tool of population-based health care, multiple challenges arise. In the case of PHC and the development and execution of practice parameters, it is reasonable to ponder the following: Did the managerial professional fully understand the consequences of her decision on patient care? Did the system offer adequate checks and balances to oversee the managerial professional's

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Perspectives on Organizational Ethics in Healthcare Organizations" highlighting four major organizational issues of concern: Resource allocation, Moral distress and organizational moral climate, Conflicts of interest, Clinical issues with a significant organizational dimension**.**
http://www.bioethicsinternational.org/blog/2008/06/06/clinical-ethicists-perspectives-on-organizational-ethics-in-healthcare-organizations-study/ (accessed at August 11, 2012)

decision making? Do clear policies articulate which decisions have been vested in the managerial professional? Has too much discretion been given to the managerial professional? How do managerial professionals collaborate with health care professionals? Do their values overlap?"[109]

There is an unavoidable competition, even within the framework of the health care system, between primary and secondary-tertiary care levels, between prevention and treatment, professional groups, public and private sectors, between the choice of treatments, all of which inevitably require cautious judgment and involve difficult choices. Therefore "organizational ethics in health care applies not simply to traditional health care organizations such as PHC but to all the organizations that populate the health care ecosystem".[110] In this respect, in developing countries or countries in transition, such as Armenia that are dealing with vast health system challenges, described earlier, along with ongoing socio-economic problems, constant reforms and restructuring, decentralization and privatization, demographic change, and the scarcity of both human and financial resources, create impacts that present many challenges to the health care system. In such a climate, health care organizational ethics is one of the major problems facing the Armenian system. It forms the reputation of the organization in general and therefore need to be examined comprehensively. They have to address the existing issues, which fundamentally influence the opinion of the people/patients, as well as, the work ethics of its employees.

Since the beginning of independence the government of Armenia has introduced

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[109] *The Moral Ecology of Health Care Organizations* p. 10-11
http://media.wiley.com/product_data/excerpt/82/07879555/0787955582.pdf (accessed at August 11, 2012)
[110] *The Moral Ecology of Health Care Organizations* p. 10
http://media.wiley.com/product_data/excerpt/82/07879555/0787955582.pdf (accessed at August 11, 2012)

multiple reforms in the system with aims and objectives based on the principles of World Health Organization (WHO). However, the challenge is to implement these reforms and strategies.

Through my recent "informal" research and the survey carried out in the hospitals in Armenia it has come to light that patient satisfaction is a subjective judgment call of the quality of care. However, it has long been considered an important component of care outcomes and is frequently integrated into evaluations of the overall clinical quality. Western countries use patient satisfaction with care as an important outcome measure in primary healthcare. However, the concept and the methodology of assessing patient satisfaction remains underdeveloped in Armenia as in former Soviet countries, where it was largely ignored or undervalued during the Soviet period because of state ideological propaganda. With the introduction of primary healthcare reforms, often accompanied by a move toward patient-centered holistic care in these countries, the need for structured and continuous assessments of patients' perceptions of the quality of care becomes evident. Armenia's health care system is challenged by several fundamental problems, including low utilization of preventive measures and basic care services, widespread misunderstanding and low awareness of freely-provided services, and the absence of ongoing national health promotion programs[111]. Therefore, my assessments in Armenia may not provide a valid alternative for the broader concept of quality, of which patient

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111 The poor services are especially evident in rural health-care facilities, where there are still large numbers of buildings with rundown conditions. In some areas health-care facilities still remain unheated during extremely cold winters and most basic supplies of drugs and equipment are lacking. "In the absence of an overall reform strategy for the national health system, policy changes have been ad hoc, making the future direction of reform uncertain, delivery and funding of health care services difficult to regulate, not developed sufficient licensing and quality standards, did not contribute to the selection of properly trained health care management". *Health System Performance Assessment; Armenia, 2009* p. 30, see **www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia** (accessed at August 9, 2012)

satisfaction is but one component. It is often influenced by physicians' interpersonal skills rather than the actual quality of medical care. In rural communities of Armenia, where patients and providers often know each other as neighbors, patients may be less critical of providers. To be more precise, the high score so generously recorded by the rural residents of Armenia regarding the services they receive at the nearest health post, may be less representative of the care provided of similar ratings by clients in more established healthcare systems.[112] The following features have to be considered to create an appropriate organizational ecology; "(1) the mission of health care service to alleviate pain and suffering and restore patients to health; (2) the complex, highly regulated environment— internal and external—under which they operate; (3) professional cultures (physicians, nurses, health care managers); and (4) the rapidly changing health care market".[113]

Although not on a large scale, my recent survey of three hospitals in Armenia showed some interesting results demonstrating the weaknesses and needs for extensive improvement in the field of organizational ethics while highlighting the incredible

[112] As reported by the "Observatory", in the 1996 World Bank Survey, with 5000 households, shows that "patients are somewhat satisfied with the medical services provided in all levels of medical care, though they mentioned that there are informal payments in the whole system. There is a tendency to self-refer to hospital specialists, which is in part a reflection of cultural norms in the Soviet era, and also indicates a lack of confidence in the quality of care provided at primary level. The physical conditions in health posts and polyclinics are often poor and the staff has had little incentive to treat patients with respect. Reforms hoped to lead to greater patient satisfaction. A fundamental problem in primary care concerns the issue of access, which has become excessively difficult for a large segment of the population due to the inability to pay out-of-pocket for health care services". see *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, p.43. (accessed at August 6, 2012)

[113] *The Moral Ecology of Health Care Organizations* p. 10 http://media.wiley.com/product_data/excerpt/82/07879555/0787955582.pdf (accessed at August 11, 2012)

progress that has been made during this last decade:

1. *Health Promotion* - Basic public health care, including health education and promotion are core components of primary care. Unfortunately, the sense of individual responsibility is very low among the mainstream of the population. The level of awareness has to be raised so that good health is the responsibility of each individual. There is inadequate attention to health promotion and health education and most importantly to behavior change communication. The programs in health education are fragmented, uncoordinated and lack inter-active elements. Therefore, the promotion of good health and education are of utmost importance and should be targeted as a systematic and sustainable effort integral to the primary health care system. There are no promotional materials available or educational events at the hospitals and in the health institutions that, if in place, could consistently increase the level of understanding and bring a sense of urgency for self-care through prevention. It is one of the psychological and cultural remnants of the Soviet era where health education and promotion was not developed and had no significance. The post-independence crisis left the country with no established health promotion and health education programs. The reforms are expected to strengthen the health promotion and education.

2. *Community Participation* - The system at the end of the Soviet era may also be characterized as one in which individuals in contact with the health care system were discouraged from taking personal responsibility. This applied to the population, which was assured of free and unlimited health care and had little sense of responsibility for their health status, as well as to the medical professionals who had no incentive to control costs or deliver quality service. The Armenian Republic thus

inherited a health care service that was both demoralized and inflexible. It is worth mentioning that the relationship between the community and the hospitals is almost non-existent. There are no volunteers, support groups, nor community organizations involved in the hospitals. The availability of spiritual care is at a very minimal level, mostly based on individual requests. As suggested by Tamara Tonoyan "it is necessary to ensure the active participation and direct involvement of the public and private sector, communities and social institutions, including non-governmental organizations and to coordinate their activities for the purpose of improving the health of population by the implementation and supervision of current programs".[114] Community or public involvement will certainly increase the level of accountability and transparency in the entire system, which will lead to good and responsible governance and leadership on a higher level.[115] Dr. Mary Cipriano Silva believes that "values and ethics are not only central to organizational culture but also to positive organizational performance. The approach is group rather than individually oriented; that is, ideally, all persons within an organization, as well as the public they serve, must share common positive values and beliefs".[116]

3. *Governance* – The governance or leadership of the health care system (WHO defines it as *stewardship*) is the most complex but the most significant

[114] Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 35

[115] The reports show that to date "there has been almost no citizen participation in the planning or management of health services. However, the fact that the Ministry of Health has chosen to use market mechanisms to force the closure of surplus provider units reflects the fact that public opinion, which would oppose the reduction of services, is perceived as a powerful political force and has a tacit influence on health policy decisions. However the Armenian public is not strongly involved in this and is weak to judge quality". *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, p. 23 (accessed at August 9, 2012)

[116] http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol31998/No3Dec1998/EthicsGap.html (accessed at August 12, 2012)

component.[117] There is a fundamental management problem, which in itself can be a cause of corruption. Without a board of directors, the physicians who possess no management training manage the hospitals. There has to exist a clear separation between the duties and responsibilities of the administration, board of directors and physicians. According to Dr. Silva, an organization's leadership is not the sole important factor. She bases this belief on real-world experiences "where strong moral corporate leadership in and of itself was unable to change the existing morally deviant value structure of an organization. In other words, not only the leaders, but also the followers must ascribe to common, sound, and ethical values. Just as unethical leadership can taint followers, morally tainted followers can impede or stop the goals of ethical

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[117] After the decentralization of the health care system it represents the following structure: Regional government funded core health services for the local population with health care coverage, until the State Health Agency took over this function in 1998. All the hospitals and policlinics, rural health units including village health centers, ambulatories and health posts of the previous system continue to function. Where formerly hospitals had nominal accountability to the local administration and were ultimately answerable to the Ministry of Health, they now have autonomous status and are increasingly responsible for their own budgets and management. Local government, however, continues to monitor the care provided while the Ministry of Health retains regulatory functions. The MOH maintains the Epidemiological Surveillance System, ensuring the collection of epidemiological data and a first-line response to environmental health challenges or outbreaks of infectious disease. These Epidemiological Surveillance stations are renamed as centers of hygienic and anti-epidemic surveillance. MOH functions include:

- Health policy development and implementation
- Drafting of the publicly-funded health system budget
- Health needs assessment
- Licensing and regulating physicians and hospitals
- Licensing of pharmaceuticals
- Human resource planning
- Central collection and analysis of epidemiological data

There are other health organizations, agencies and institutions within the health care system; Department of Reforms, Program Implementation and Monitoring, National Institute of Health, which is a merger of a number research and continuing education institutes, Armenian Health Information Analysis Centre.

The Board of MOH consists of the heads of all Ministry departments (vice ministers) and representatives of the National Institute of health and reviews all plans for health services. There is no equivalent at a regional level. The process of decentralization has meant that the MOH has given up some of its responsibilities. However this has produced tensions as MOH authorities resist transferring their power to other authorities. For comprehensive analysis see *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, pp. 9-12, 19, 23. (accessed at August 12, 2012)

leaders".[118] The system has to develop a clear structure of checks and balances to avoid any apparent unethical conflict of interests as was evident in the previous government; i.e. the Health Minister being an owner of two major medical centers, which, as the other hospitals public and private alike, benefitted from funding by the government through the State Health Agency. Other factors for good governance and productive stewardship are the use of evidence and information, implementing methods for collecting, reporting and analyzing health information to improve the efficiency of the system, data availability, quality and use, enhancing the quality of vital registration information, harmonizing existing health information surveys to ensure methodological consistence, and expanding the capacity to analyze trends and the preparation sub-national reports. Health care system efficiency needs to be considered in conjunction with improvements in the quality and safety of services, monitoring the quality and safety, and establishing organized programs delivered through primary care services. Quality health care services cannot lead to better results and improved health status if people cannot access these services. Therefore, good stewardship requires good health information. Health information is not useful if it is not accessible to those who require it for analysis and decision-making.[119] Dr. Sylva presents an interesting and enlightening account of health care organizational ethics in relation to the leadership position of a health care person, advocating the necessity for a broader and deeper understanding of ethics and applying it on every level of decision-making. She indicates that:

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[118] http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol31998/No3Dec1998/EthicsGap.html (accessed at August 12, 2012)

[119] *Health System Performance Assessment; Armenia, 2009* pp.15-17, 32,33 see **www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia** (accessed at August 12, 2012)

> "Too often persons in health care leadership positions tend to micromanage or ignore ethical issues or allow legal concerns to override ethical decisions. When executives micromanage, they are unable to see their organizations as a whole. Consequently, they are unable to see the necessity for an ethics infrastructure that not only includes their own departments but also all other departments within an organization. When health care executives are blinded to ethical issues, they are prone to act with insufficient knowledge and insight, often resulting in inadequate decision-making. A common example is the allocation of limited resources. If a health care executive views such allocation only as a fiscal decision, the executive is blinded to the fact that all decisions of allocation of limited resource are, ultimately, ethical in nature. And, lastly, when health care executives allow legal principles to override ethical principles, the executives are often operating at a minimum, rather than a maximum, standard of practice".[120]

The continuous challenge lies in the sphere of human resources and training, not only on the scientific or technical level, but also in accordance with the principles of bioethics or ethics in general. Reportedly the reforms seek to address the overall human resource issue. Problems such as overstaffing and poor quality of care are to be remedied by restructuring payment mechanisms and through licensing and by establishing new revised training programs and management skills. Even though there are formal requirements for continuous medical training, the number of medical professionals who receive the training is below requirement and, moreover, there is no evaluation of said training or any other process to determine what impact they have. Although reforms

[120] http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol31998/No3Dec1998/EthicsGap.html (accessed at August 13, 2012)

introduced by the government to downsize health care facilities and to implement a new optimization plan may ease the financial burden, this will certainly impact the already high redundancy rate on the overall economy. Unemployment in the medical field will become an unwelcome feature of the Armenian health care system. As identified by the "Observer" "it seems inevitable that large numbers of medical staff will lose their jobs, which has already started to happen".[121]

4. Social Care - Public social care services are extremely limited; the private sector is not involved. There is a single hospital for the mentally and physically handicapped and there are no nursing homes for the patients needing continuing long-term care. There is no provision of long-stay hospitals for the chronically ill and there are no daycare centers for special needs groups, nor is there a developed network of social workers. There are only two homes for the elderly to serve the entire country. Consequently, the system depends on the Armenian tradition of caring for the extended family, on humanitarian assistance, and on an acute hospital sector to meet social care needs. Elderly couples and single pensioners are financially supported by their children and the care of the elderly is mainly provided by the family and not by the state. The current system focuses on in-patient care and a lack of appropriately trained social workers and other mental health providers further limits the potential for providing services at the ambulatory and community levels.[122] There is, however, a tremendous change and reform

[121] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, p. 58 (accessed at August 9, 2012)

[122] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, www.euro.who.int/document/e73698.pdf, pp. 52-54, (accessed at August 13, 2012) see also *Health Systems in Transition*; Armenia, Vol. 8 No. 6 2006 p. 123 see www.euro.who.int/document/e73698.pdf (accessed at August 13, 2012)

in childcare. The government has taken significant measures to implement new reform programs to make the system financially accessible for the families;

--From 2004 childcare for children between the ages 0-7 was free of charge.[123] The same was also applicable to children between the ages of 7-18, but only for critical or chronic cases.

--In 2011 the Government introduced a new program "Childcare Certificate", [124]which is aimed to reduce the possible corruption risks in the hospitals. In light of the current situation, with its challenges and ongoing reform process, the government has developed long-term objectives and direction to:

- Increase access to health care services
- Improve structure and management
- Improve quality of care
- Promotion
- Balance social and market values

5. *Resource Allocation* - The last point has to deal with the growing financial needs and support of the health care system, which is a worldwide concern. It is rightfully said, that "health is priceless" but it is equally true that it is expensive too. Today it is one of the most difficult global problems particularly with the most recent world financial crisis, even in the most developed countries. To date, no financial scheme has been introduced to satisfy patient expectations or needs completely; however, the problems and challenges

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[123] http://www.unicef.org/worldfitforchildren/files/Armenia_WFFC5_Report.pdf (accessed at August 9, 2012)

[124] http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/child-and-adolescent-health/news/news/2012/06/who-mission-to-support-armenia-in-improving-quality-of-primary-health-care-for-children (accessed at August 13, 2012)
http://ec.europa.eu/world/enp/docs/2012_enp_pack/progress_report_armenia_en.pdf (accessed at August 13, 2012)

vary in developed and developing countries. But, the universal challenge regarding fair financing, just distribution, and allocation of available resources, remains the same for all types of models and schemes, whether in wealthy or poor countries; health care is the sphere where the most allocation, its source and sustainability, the monitoring and transparency is needed. John Harris' comprehensive analysis eloquently describes the need for a proper and ethical allocation of the resources according to the need of the individual[125]. On a larger scale, to determine the overall health care budget, there has to be careful examination of means, principles and benefits, always considering the ethical issues that may arise from the distribution of resources to the health sector. It involves questions of distributive justice because health care resources are nearly always scarce relative to need[126]. The critical point is that in order to prevent some of the above-mentioned problems, health care leadership has to completely grasp the vision and the value driven mission of the organization, to comprehend that behind any form of decision there is an ethical issue and perform accordingly. Therefore, it is necessary that a "model should influence decision-making. This question is both a personal challenge to decision makers in provider organizations and an organizational challenge. Each decision maker within such an organization must judge and choose how much to consider standards, how to embed priorities as core values in their mission and throughout the organization's culture and decision-making processes. Careful ethical decision-making takes reflection, practice, and dialogue, and it is learned best in the company of strong core values and

[125] John Harris, *Micro-allocation: deciding between patients*, *A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, p. 293, 2007
[126] Daniel Wikler and Sarah Marchand, *Macro-allocation: dividing up the health care budget, A Companion to Bioethics*, Ed. By Helga Kushe and Peter Simger, Blackwell publishing, p. 306, 2007

persons experienced in organizational ethical reflection." [127]

In the previous section we have discussed at length, that during the Soviet Era, planning and allocation decisions were taken centrally. Today decentralization and privatization are well underway, indeed, with some negative impact on the health status of a large segment of the population. These include the introduction of inter-regional funding inequities, unbalanced national health priorities in each region, confused lines of authority and accountability as well as operational problems. Furthermore, the functional management, regulations and mechanisms of quality control have been weakened. The main sources of mobilizing resources for health services are taxation revenues, social health insurance contributions, private insurance premiums and out-of-pocket payments. Despite the fact that over the years the budget grew 13% it still proved insufficient to meet health care needs. This situation was held to be unsustainable as a consequence of Armenia's severe economic problems. A predominantly private out-of-pocket system was introduced due to the extreme difficulties experienced in collecting tax revenues. Thus, health care became mostly available to those who were able to pay out-of-pocket, which resulted in the considerable decline in public demand for health care services, due to low purchasing power and the absence of state medical insurance.[128]

By 1997, private, out-of-pocket payment had become a main source of financing for the health care system, and the government set out to establish a state health program in which certain services would be provided free of charge to targeted segments of the

[127] American Medical Association, Physicians dedicated to the health of America Organizational Ethics in Health Care*: Toward a Model for Ethical Decision Making by Provider Organizations* by David Ozar, PhD, Jessica Berg, JD, Patricia H. Werhane, PhD, Linda Emanuel, MD, PhD, p. 17 (accessed at August 14, 2012)

[128] Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 9

population. Unfortunately, the majority of health financing remains largely based on informal, out-of-pocket payments, which can lead to inequalities in health care access and health outcomes. The mechanism for out-of-pocket payment is that patients pay full cost of the treatment directly to medical providers. The out-patient services are charged on a fee-per-visit basis, with additional charges for supplementary examinations or procedures. It also includes payments for all drugs. These charges were implemented to put an end to under-the-table payments, which were previously endemic. Patients either paid a pre-determined tariff or were assured of their explicit right to free health care as a member of a special category. While it was never possible to calculate the total worth of under-the-table payments, anecdotal evidence suggests that they were substantial and may have been at par with the sums to be charged by hospitals under the new system.[129] However, the real magnitude of out-of-pocket contributions is unknown. The reliance on direct out-of-pocket payments obviously undermines the principle of equity with respect to both financing and access. Fairness in financial contribution or equity in financing is concerned with ensuring that households do not become impoverished for obtaining needed health care and that poor households pay less into the health system than rich households.[130] Accessibility of even the most essential services has become a very serious problem, mainly for socially vulnerable groups because of low purchasing power,

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[129] *Health System Performance Assessment; Armenia, 2009* p. 22, see **www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia**. (accessed at August 9, 2012), *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p33, www.euro.who.int/document/e73698.pdf, (accessed at August 9, 2012)

[130] Hasmik Harutyunyan*, Financing of the Health Care System in the Republic of Armenia in the Period of 1999-2000: Perspectives for Improvement*, Yerevan, 2003, p. 8, Tamara Tonoyan, *Health Care System in Armenia, Berlin*, 2004, p. 8, *Health Systems in Transition; Armenia, Vol. 8 No. 6 2006* pp. 43-51 see *www.euro.who.int/document/e73698.pdf* (accessed at August 9, 2012) *Health System Performance Assessment; Armenia, 2009* p. 22, see **www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia**(accessed at August 9, 2012) Tamara Tonoyan*, Health Care System in Armenia*, Berlin, 2004, pp. 10-11

absence of state medical insurance, the introduction of out-of-pocket payments and the increase in informal payments. Although government health expenditures have increased, households continue to finance the principal share of health system expenses, largely, through informal, out-of-pocket payments for services at the point of delivery. The out-of-pocket payment is one of the biggest problems and it cannot be solved in isolation.[131]

The very low prices paid by the state for state-funded services have worked to increase "under the table payments". These prices are too low to cover the costs of

[131] The MOH continues to be the third party payer for certain state-level services; its former role of third-party payer for services included in the state's basic package (BBP) was taken over by the State Health Agency in 1998. *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p.11, www.euro.who.int/document/e73698.pdf, (accessed at August 9, 2012). The introduction of SHA (State Health Agency) as a government organization independent of MOH responsible for health care financing has produced tensions with MOH authorities. SHA was established with the World Bank assistance in an attempt to separate provision from financing. SHA assumed the role of third party payer as an initial step in direction of developing a full-scale social insurance organization. As all public financing of health care is via taxation revenues, the SHA receives the state allocations for health from the Ministry of Finance and distributes these to health care facilities. The SHA has developed into a large bureaucracy that has become competitive with the MOH. *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p.12, www.euro.who.int/document/e73698.pdf, (accessed at August 9, 2012) see also. *Health System Performance Assessment; Armenia, 2009* p. 17, see **www.euro.who.int/en/what-we-do/health-topics/Health-systems/health-systems-governance/publications/2009/armenia** (accessed at August 15, 2012)

Case-based approach is not as yet very widespread; SHA is pushing it and would like to see case-based funding in every facility throughout the country. *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p. 13 www.euro.who.int/document/e73698.pdf (accessed at August 15, 2012)

Hospitals and polyclinics are now autonomous, self-financing enterprises with considerable decision-making powers. Ibid.p.13. The change in status of hospitals and polyclinics has contributed to intensifying the severe financial difficulties faced by these institutions on account of the fact that as joint-stock companies they are liable to pay taxes. In fact, they face huge debts because not only are third-party payments set below treatment costs but, in addition, the SHA is unable to reimburse them according to the agreed prices for services provided within the state's basic package due to shortfalls in its own budget. *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p. 24, www.euro.who.int/document/e73698.pdf (accessed at August 15, 2012)

Financial resource allocation is made through state budget, which covers health management and administration, hospitals, PHC, emergency health care, hygiene and anti-epidemic control, other health related expenses; MOH -20% 1999, SHA-80*% Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp. 64-67, www.euro.who.int/document/e73698.pdf. (accessed at August 15, 2012)

services provided, thus providers are forced to request payments from patients even when a patient falls within a vulnerable group category and is entitled to free health. Accessibility has become a fundamental problem in primary care concerns, affecting a large segment of the population because of their inability to pay for healthcare. Under-the-table payment was a common practice of the Soviet system and there is still evidence that this system continues to be widespread. According to World Bank findings and reports, the official payments comprise 10-12% of the total income for medical facilities, whereas total private, out-of-pocket financial flows to the hospital sector are 3-4 times greater than the state budget allocation. It opens opportunities for widespread tax evasion. The result is that the main part of the system's revenues evades official structures, thus making the improvement of the overall health care financing system impossible. [132] The share of patients making informal payments in the health sector in Armenia is at 91%, with direct payments at 60% - more than twice the budget; the shadow market offers more valuable incentives and simple financing methods. Paid services make health care unaffordable, access has become dependent on the ability of the household to afford informal payments to doctors, payments are made to the provider not to institutions or towards the maintenance of the hospitals.[133] This represents a radical reduction in the

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[132] *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p. 34, www.euro.who.int/document/e73698.pdf, (accessed at August 15, 2012)

[133] Dr Irina Kazarian observes that "informal payments in the health sector in Eastern Europe and Central Asia are emerging as a fundamental aspect of health care financing and a serious impediment to health care reform. The frequency of informal payments exceeds 60 percent in the CIS countries, where data is available, reaching 91 percent in Armenia, and are reported in all but a handful of Eastern European countries. Inpatient care carries the highest costs, but pharmaceuticals are the most frequently purchased health service that public providers do not finance. In Armenia tactics such as not divulging the full cost of treatment from the onset, refusing to complete treatment without further payment, and prescribing harmless but nontherapeutic drugs in which physicians have a financial interest have become increasingly common". See Kazarian (Gazaryan) Irina PHD, MSc, www.policy.hu/kazaryan/ (accessed at August 9, 2012), see also Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 24.

benefits covered and stems from the well-supported belief that a small part of the population has considerable sums of disposable income but operates almost exclusively within the boundaries of the informal economy. The "unofficial" nature of most economic transactions leaves the country with a tax base that does not reflect the level of economic activity and makes it impossible to generate sufficient taxes to fund health services adequately.[134] Everyone, except members of the special groups defined as vulnerable by MOH, must pay in full for all medical care. The BBP[135] is the publicly funded package that includes a list of services covered and a list of groups that are eligible for coverage. However, one of the main issues was the identification of target families that fulfill poverty criteria. The earlier approach was misleading as an individual/family could be identified as belonging to a vulnerable group, and yet also could afford to pay. As of today no effective system has been developed for vulnerable group identification.[136]

[134] *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p.32, www.euro.who.int/document/e73698.pdf. (accessed at August 15, 2012)

[135] Basic Benefits Package was introduced to protect socially vulnerable groups *see Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp.31, 156, www.euro.who.int/document/e73698.pdf. (accessed at August 15, 2012)

[136] Vulnerable groups have coverage, and are indicative of the government's commitment to support the health care system while in fact it does not have the financial resources to do so. The main revenue of the health care facilities is through user fees and informal payments. MOH is in process of developing a "realistic package" in line with the available budget and in line with realistic prices for the services provided by the health facilities. MOH increased user fees on ambulatory and emergency services. While the new package is believed to be an improvement with more realistic prices, this did not completely solve the problems of access to services by the most vulnerable and informal payments remain prominent. *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp.19, 28 www.euro.who.int/document/e73698.pdf (accessed at August 16, 2012)

There is no effective health insurance scheme currently in operation in Armenia, although it is expected that a voluntary insurance system will develop.[137] There are some private companies, which provide voluntary insurance health programs. [138] The long-term vision is to introduce a comprehensive compulsory health insurance system, whereby most of the population will be covered. It may take at least ten years, as forecasted by specialists, as it depends upon increases in per capita GDP, reductions in informal payments both in the health sector and the general economy, and improvements in the tax system including increased compliance with payment of income tax. A less comprehensive mix of voluntary and compulsory insurance systems may be achieved at an earlier stage.[139] Improvement of health care financing mechanisms through the development of a system of social insurance and the encouragement of private, voluntary insurance remains one of the leading objectives of the government's health policy. However, low incomes of the population (including health workers) and the presence of a very widespread shadow economy make this a longer term objective that will only gradually be achieved. Socio-economic factors are the major obstacles for the implementation of medical insurance, which causes decline in subsidized health services and prevents the visits for medical assistance. The most challenging problem that must be faced involves the drastic decrease in access to health care services and the decline in the population's and health professionals' confidence in the health care system and its ability to provide even the most essential services to vulnerable groups, due to the introduction of private, out-of-pocket payments and the increase in under-the-table payments, which

[137] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp. 28, 14, www.euro.who.int/document/e73698.pdf, (accessed at August 16, 2012)
[138] ibid. p. 29-31

[139] ibid. p. 14

has accompanied the new financing system.[140] The problem arises because health care expenditure is directly related to the economy. Thus, health care is grossly under-funded because the budget allotted does not meet health service costs. The Armenian health system is overstaffed and over-provided with health care facilities. An effective means of adjusting capacity is to allow market forces to play a role in determining which hospitals or primary care facilities will remain open so that health care institutions become largely self-financing.[141] The MOH is expecting approximately 50% of health care institutions to go bankrupt. The plan is based on a contradictory combination of market forces on the one hand, and development of "optimization plans" by regional governments, on the other which focus on the planned reduction of hospital bed capacity by use of such criteria as beds per population. Further, there is no coherent strategy concerning what should be done with the resulting unemployment. The MOH priority is to shift from secondary and in-patient care, to primary, preventive and ambulatory care and it expects the market to play a significant role in achieving these ends. However, "as a result of the use of market competition as a vehicle for cost containment in health care, society is beginning to realize that health care values have been undermined by this policy and that society is the worse for it. The analogy between health care organizations and professional ethics demands that patient care be central."[142] Therefore, the new payment

[140] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp. 76, 77, www.euro.who.int/document/e73698.pdf, (accessed at August 16, 2012)Tamara Tonoyan, *Health Care System in Armenia*, Berlin, 2004, p. 13

[141] *Health Care Systems In Transition*; Armenia, 2001, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, pp. 19, 36, 40, www.euro.who.int/document/e73698.pdf, (accessed at August 16, 2012)

[142] American Medical Association, Physicians Dedicated to the Health of America Organizational Ethics in Health Care*: Toward a Model for Ethical Decision Making by Provider Organizations,* by, David Ozar, PhD, Jessica Berg, JD, Patricia H. Werhane, PhD, Linda Emanuel, MD, PhD, pp. 8-9 (accessed at August 14, 2012)

structure should create incentive for primary care physicians to prioritize preventive rather than curative medicine thus furthering the MOH policy objectives.[143]

It is very explicit that the incorporation of direct out-of-pocket payments into the funding system obviously undermines the principle of equity with respect to both financing and access. Therefore, the success or failure of the system is linked with the performance of economy and the government should try to re-channel resources currently in the underground economy, thus further increasing available public funds. More funding would allow the MOH to extend the basic package and devote additional resources to PHC, focusing on establishing an affordable system in which quality of care and the direct, patient-centered care can be guaranteed. Having analyzed the health care organizational ethics aspect of Armenia's health care system, with all its challenges and problems, it should be concluded that it is an absolute imperative that the system has to become patient centered, linked to the vision and value driven mission of the organization, which should help and,

> "develop mechanisms that ensure that the values that ought to drive decisions and actions actually do so. Once the organization is confident that it has identified the right core set of values, it must enable those values to shape and support the life of the organization. The mission, vision, and values of the organization must be used to guide organizational behavior; for example, explicit, focused discussion of mission, vision and values should be part of all policy-

[143] *Health Care Systems In Transition; Armenia, 2001*, written by Samvel G. Hovhannisyan, Ellie Tragakes, Suszy Lessof, Hrair Aslanian and Ararat Mkrtchyan, p. 20, www.euro.who.int/document/e73698.pdf (accessed at August 16, 2012)

> making activities. Core values must be reflected in organizational policies and practices and in the organization's relationships with patients, staff, the community and the healthcare system as a whole".[144]

Currently there are a host of biomedical issues in Armenia that are not yet exposed due to social or traditional psychological reservations and cultural barriers but in reality they exist, and are not properly addressed. In some instances it is because of the lack of appropriate information, promotional material, and education as we discussed it above. There is also an absence of deep and comprehensive analyses, public discussions and debates with regard to the issues that are present in the society, although, not on a massive scale. However, there is a growing awareness within society towards biomedical issues such as abortion and reproduction related issues, surrogacy, euthanasia, end of life issue, organ transplant and donation, children with disability etc. These issues require a proper ethical and theological approach as strong assistance to the providers and patients alike. As emphasized earlier, in decision–making, human dignity, responsibility, judgment and autonomy have to be respected. These parameters of bioethics in health care should also be examined from the theological perspective taking into consideration the historical cooperation that exists between bioethics and theology, which was presented in the first chapter. Theology and especially Orthodox theology brings a new dimension and perspective into the decision-making process of biomedical issues, sending a clear message that "there is a dimension to life, which is not subsumed to the scientific and the technological. For ethics, this means that decision-making on questions

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[144] *Implications of Organizational Ethics to Healthcare by Carolyn Ells and Chris MacDonald* pp. 37-38. http://www.ethicsweb.ca/files/organizational_ethics.pdf (accessed at August 16, 2012)

of medical ethics cannot be restricted, or even adequately conducted, if some of its major criteria do not transcend the science and technologies themselves".[145] In other words medical technology does not provide its own exclusive moral criteria. Therefore, science and technology alone are not adequate for setting moral criteria in decision-making. The fundamental realities postulated by faith offer a number of the central perspectives, which speak most directly to bioethical questions. It can thus be stated that "there is no split between the two and it is made evident by their shared history; nevertheless, there is no collapsing of each into the other, either. In reality, there is a potentially creative tension between the two, as they emphasize two varying dimensions concurrently affecting the patient".[146]

In the next section I will discuss one of the pertinent issues in Armenia related to reproductive health and abortion in particular. I will identify the problem within the socio-economic, cultural and ethical matrix and will reflect on the subject from a bioethical and theological perception. However, I shall avoid too extensive discussion on the reproductive health and abortion issues, the long debates by "pro-life" and "pro-choice" arguments, and shall mainly focus on one particular aspect - that of gender selective abortion with its dangers and negative impact on society.

[145] Stanley S. Harakas, *Wholeness of Faith and Life: Orthodox Christian Ethics*, Brookline, Massachusetts, 1999, p. 88.

[146] ibid. p. 89

2.3 *Abortion: The Unborn Daughters of Armenia*

Before undertaking the topic of abortion and is implications in Armenia, the global problem has to be established; its current state, the different approaches and trends that either support or oppose the notion of abortion and the understanding of bioethics and theology of the subject, and some other issues that are related to reproductive health. It is obviously not an easy subject with clear and definite answers as it is connected with human beings, personhood and dignity. It is comprised of complex issues of responsibility, judgment, autonomy, rights inter-related with bioethics, theology and religion. It is also linked to global population and demographics, political, ideological and social issues involving all segments of society pro or against, leftist and rightist, socialists and capitalists, atheists and religious believers, physicians, ethicists and theologians.[147] It requires compassion, community and pastoral care. Since no discussions or conclusions will be made on the matter of abortion in this paper, I will deliberately circumvent the debates and arguments on "pro-life" and "pro-choice" movements, only impartially presenting the views of both camps. Indeed, I will introduce the perspective of Orthodox theology to the questions of the subject.

According to some world and American statistics there are approximately 126, 000 abortions per day and 43.8 million per year worldwide. 78% of all abortions are obtained in developed and developing countries and 22% occur in undeveloped countries. About 24 million women obtain legal abortions each year, while an additional 20 million

[147] see the extensive analyses by Margaret Pabst Battin regarding the population control and demographic transition. Margaret Pabst Battin, *Population Issues, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, pp. 149-161.

abortions are obtained in countries where it is restricted or prohibited by law.[148] It has long been permitted in China, India and the rest of Asia and is now practiced in Europe and North America and there are some countries that partially permit abortion, when the woman's life is in danger. As reported by Demographic and Health Survey, Armenia (ADHS 2005), "in Armenia, as in all former Soviet countries, induced abortion was the primary means of fertility control for many years. It was first legalized in the Soviet Union in 1920 but was banned in 1936 as part of a pro-natalist policy. The decision was reversed in 1955 when abortion for non-medical reasons was again legalized".[149] Reports show that 500 women worldwide die each day from abortions induced under precarious conditions.[150] Just to compare this number to the Armenia case, ADHS 2000 final reports indicate maternal deaths rates from induced abortion was between 10 - 20%, however, in 2005 this number declined to 5%. It is still considered very high for a country with a population of approximately 3 million, where almost half of pregnancies (45%) resulted in an induced abortion.[151]

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[148]See,http://www.worldometers.info/abortions/, (accessed at August 17, 2012) http://www.who.int/reproductivehealth/publications/unsafe_abortion/abortion_facts/en/index.html (accessed at August 17, 2012)

[149] After the collapse of the Soviet Union in 2002 the Parliament of the Republic of Armenia adopted a new law "About Reproductive Health and Reproductive Human Rights", that confirmed the legality of induced abortion up to 12 weeks of gestation. *Demographic and Health Survey, Armenia 2005*, p. 73.

[150] Mary Anne Warren, *Abortion, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, p.128.

[151] *Demographic and Health Survey, Armenia (ADHS) 2005*, p. 73. The results of findings show that among woman, who have ever had an abortion, almost two-thirds have had more than one abortion; 45% reported 2-3 abortions, 11%-4-5, 8%-6 or more. Ibid p.77.

According to the results of the 2010 ADHS, the TFR is 1.7 children per woman. This is below replacement level fertility (which is slightly more than 2.0). The 2010 ADHS rate of 1.7 is the same as the rate estimated by the 2000 ADHS and also the 2005 ADHS. Thus, there is no evidence of change in overall levels of fertility in Armenia over the last decade. The data suggests, however, some change in terms of urban-rural differentials. While urban fertility is statistically the same (1.5 in 2000 versus 1.6 in 2005 and in 2010) there is some evidence of decline in rural areas (from 2.1 in 2000 to 1.8 in 2005 and in 2010). Overall, the pattern of age-specific fertility rates is the same, although there has been a shift away from childbearing at

In view of this reality and under these circumstances it is worthwhile to examine the ideological bases of the abortion debate, which is "controversial in our time, not only because many people believe that fetuses have a right to life, but also because it has become a potent symbol of ancient debates over sexual morality and the proper social roles of women".[152]

The arguments in support of abortion propagate autonomy, basic moral rights of women, the freedom to choose, human liberty, socio-economic conditions, and finally, the growing population issues that pertain to ecological disaster with its implications of climatic instability and insufficient food supply. However, the main argument lies in the question of fetal life and its right to life. The claim is that, although the early fetus through the first trimester has resemblance of a face, hands, feet and other physical features it "certainly lacks neurophysiological structures and functions, which are necessary for the occurrence of conscious experience, as well as for thought, self-

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the youngest ages (15-19) to higher levels of fertility in older ages, particularly the late twenties. At the national level, the 2010 ADHS rate of 1.7 is slightly higher than the official government rates of 1.55 published for 2009 and of 1.4 for 2008. An important difference in the computing of these rates should be noted: whereas the ADHS rate for the three years preceding the survey is based on pregnancy history of the de facto population (persons who stayed the night before the interview in the household), the official government annual rates are based on registration statistics of the de jure population (persons who usually live in the household). Rates of induced abortion shows age-specific abortion rates and Total Abortion Rates (TAR) from the 2010 ADHS. These rates are calculated in a manner analogous to the calculation of fertility rates. The reported rates refer to the three-year period prior to the survey (i.e., approximately November 2007 to November 2010). The TAR is interpreted as the number of abortions a woman would have in her lifetime if she experienced the currently observed age-specific abortion rates during her childbearing years. The total abortion rate for Armenia is 0.8 abortions per woman. This means that the average number of abortions an Armenian woman will have according to current abortion rates is approximately half of the number of births she will have 1.7. The age-specific rates of induced abortion peak among women age 25-29 and decline among women in older age groups. The 2010 ADHS TAR of 0.8 is lower than the 2005 ADHS rate of 1.8 and is considerably lower than the 2000 ADHS rate of 2.6. The reason for such a considerable difference is not clear; however, it is notable that more married women reported use of modern methods of family planning in 2010 than in 2005 and in 2000 (27 percent in 2010 versus 20 percent in 2005 and 22 percent in 2000). It is likely that an increase in the use of modern methods of contraception could have contributed to a lower TAR. See *Demographic and Health Survey, Armenia, 2010*, pp.8-10.

[152] Mary Anne Warren, *Abortion, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, p. 138.

awareness and other more complex mental capacities". The most important basis of the argument is that, as a consequence of the absence of the mentioned human capacities, the fetus in its pre-embryonic state "cannot suffer pain or be deprived of anything that it wants. It has a biological life but not a biographical life – that is, a life that has already begun to experience. Thus, while we may value its life, it cannot, as yet, value its own life; and this fact may cast doubt upon the claim that it has a right to life comparable to our own".[153]

Alternatively, the opponents of abortion advocate that, first and foremost, "human fetuses from conception are human beings, and thus have the same moral right to life as other human beings. A fetus has a right to life by virtue of its potential to become a human being and any reason that the woman herself considers adequate is an objectionable cheapening of human life"[154]. In other words, even if a pre-embryo may not be human organism, the embryo developed thereof, is, by the virtue of its potentiality, therefore "neither its early stage nor its social invisibility, nor its dependence upon the woman's body for life support can justify the denial or diminution of its basic human rights, including the right to life".[155] The practice of induced abortion can adversely affect woman's health, reduce her chances for further childbearing and contribute to maternal and prenatal mortality. Along these lines there is certainly another aspect that is interconnected with the maternal behavior and responsibility toward the fetus during her pregnancy, which can decisively affect not only the fetus but also the future child. Therefore, as it is observed by Bonnie Steinbock, it "raises important questions for

[153] Ibid. pp. 130-131, 127-129.
[154] Ibid. p. 127
[155] ibid. p.129.

biomedical ethics: What obligations does a pregnant woman have to her developing fetus? How her interests are to be weighed against those of the fetus and future child? Who should resolve mother-fetus conflict and what role, if any, ought the state play?"[156] In light of such questions, "pro-lifers" strongly support the idea that the pregnant woman has a moral obligation towards protecting the embryo since it is regarded as pre-born child and thus, "whatever the status of the fetus, children have interests and rights, including the fundamental moral and legal right not to be injured. Admittedly, the child who has been harmed by maternal behavior did not exist as a child at the time the injury was inflicted, but that does not lessen the obligation to avoid causing the child who is going to come into existence foreseeable injury".[157]

I will now turn to the Orthodox Christian stand on abortion and how it is viewed based on the Orthodox teaching of anthropology, personhood, human dignity and responsibility. It embraces the conviction "that personal human life begins, not at implantation or at quickening or at the moment of birth, but at conception, described as "syngamy" the creation of genetically unique individual through the process of fertilization. For this reason it is morally obliged to accept a pro-life philosophy, which is based on an authentic biblical anthropology rather than on social concerns or political process".[158] For such belief the fundamental and central principle of orthodox anthropology is that the human being is created by God in His own image and the assessment of the possibilities of dangers that modern biomedical technology possess

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[156] Bonnie Steinbock, *Mother-Fetus conflict, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, p. 135.

[157] Ibid. p. 137

[158] John Breck, *The Sacred Gift of Life*, New York, 2000, p.153.

should begin with that affirmation, otherwise the person would be reduced to "cipher with neither purpose nor hope. Others have already carried out this reduction with the creation of "secular man" who believes nothing and ultimately cares for nothing".[159] Although the Orthodox Christian teaching refuses all kinds and forms of abortion, it makes one exception, that is, when a woman's life is seriously endangered by various reasons. It should be noted, though, that the case is not defined or judged on the grounds of human rights or choice, but rather on the grounds of intentionality imbedded in the fact that "the intention is not to kill the child or terminate the pregnancy". It is tragic and regrettable to make therapeutic interference to end the growing child, even though it is a necessary and inevitable consequence. In this extreme circumstance the "needs and desires of other members of her family should be taken into consideration…the tragic choice imposed upon her will lead her to preserve her own life rather than abandon those who relate to her in terms of emotion, memory, shared responsibility, and love".[160]

As mentioned earlier in this section, in Armenia, although in 2005 (37%) the overall abortion rate had declined compared to 2000 (47%), the decline factors are not clear. The ADSH observes that abortion, as the main method of fertility control has not changed dramatically, therefore, there have to be some other reasons for the decrease. ADHS identifies that there could be the following reasons; 1) underreporting, the absence of clear data and information, 2) unregulated use of drug called Cytotec, which is self-prescribed and can be performed at home, 3) the sense of growing reluctance to answer the questions about abortion, 4) the inexperienced interviewer.[161]

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[159] ibid. p. 146
[160] ibid. p.162
[161] *Demographic and Health Survey, Armenia, 2005*, p. 79

According to official statistical data of the Republic of Armenia, starting from 1993, the sex-at-birth ratio in the country has constituted 110-120 boys to 100 girls, while the accepted normal biological ratio is 102 -106 boys to 100 girls. In other words, in the last decade in Armenia fewer girls and more boys have been born. In order to check one possible cause for this skewed ratio, prenatal sex selection, UNFPA Armenia initiated a study in 2011. The study findings suggested that on average, each year, 1,400 baby girls were not being born because of prenatal sex selection. As to the causes of more male births, the study pointed mainly to the necessity to continue the family tree; boys being the inheritors of the property; and much more active role and higher social mobility of boys in the society.[162].

Concerns over prenatal sex selection in Armenia, as well as in some other countries of the region , Georgia, Azerbaijan, and Albania was also raised by the Parliamentary Assembly of the Council of Europe Resolution 1829, approved last year. It states that:

"1. A preference for sons and discrimination against women is so widespread in the world that, spontaneously or under pressure, millions of women decide not to give birth to daughters, who are considered a burden to their family and unable to perpetuate the family lineage.

2. Sex selection is a huge problem in some Asian countries, where the selective abortion of females, together with the killing of female newborns has been practiced for decades. Prenatal sex selection is indicated by a "skewed sex ratio", meaning a departure from

[162] http://eeca.unfpa.org/public/pid/9201 (accessed at August 17, 2012)

the natural average sex ratio at birth of 105 boys for 100 girls. This tends to increase as the number of children goes up in a family, or when there are legal or economic restrictions to the size of the family.

3. There is strong evidence that prenatal sex selection is not limited to Asia. In recent years, a departure from the natural sex ratio at birth has been observed in a number of Council of Europe member states and has reached worrying proportions in Albania, Armenia, and Azerbaijan, where the sex ratio at birth is 112 boys for 100 girls and in Georgia where it is 111 boys for 100 girls.

4. The Parliamentary Assembly condemns the practice of prenatal sex selection as a phenomenon which finds its roots in a culture of gender inequality and reinforces a climate of violence against women, contrary to the values upheld by the Council of Europe". [163] Even more striking and shocking is the report by US based "Life Site News" magazine "that Armenia has the world's second worst ratio of boys-to-girls in the world, second only to China".[164]

Although, it is no longer a secret that selective abortion exists and is a problem in Armenia and society is becoming more and more aware of it and is beginning to speak about it, the level of public awareness is by no means on a significant and sufficient level. In this respect, the role of community and church participation, NGOs and mass media is

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[163] http://assembly.coe.int/Main.asp?link=/Documents/AdoptedText/ta11/ERES1829.htm (accessed at August 9, 2012) *Assembly debate* on 3 October 2011 (29th Sitting) (see Doc. 12715, report of the Committee on Equal Opportunities for Women and Men, reporter: Ms Stump; and Doc. 12727, opinion of the Social, Health and Family Affairs Committee, reporter: Mr Xuclà i Costa). *Text adopted by the Assembly* on 3 October 2011 (29th Sitting). See also Recommendation 1979 (2011).

[164] http://www.lifesitenews.com/tag/armenia (accessed at August 17, 2012)

of absolute importance. There is evidence and stories being revealed by some individual journalists and media which show the catastrophic situation of the issue, the psychological and spiritual state, the pain and the suffering of the women who are forced to undergo selective abortion. One such story tells that “when 35-year-old Narine made the journey from her village to Yerevan, she wondered whether she would keep the baby. Already a mother of two girls, she needed a son. “I have to bear a boy to inherit my husband’s family name. He should have a son by his side,” she would later say. The trip ended in yet another abortion. She had traveled to Yerevan for an ultrasound to check the sex of the fetus. The results showed the baby would be a girl, and thus, she made the difficult choice to end her pregnancy. It was an emotionally taxing decision. Narine would develop depression; a sense of guilt and bouts of crying would haunt her for weeks”. Another story reveals the sad story of a woman named Armineh “She was 22, when she graduated from university and got married. “After a month, I learnt that I’m pregnant," Armineh says. The girl’s name would be Naneh, a sweet name for a girl; the girl, who was never born. Armineh was forced to have an abortion. "I still remember my girl’s every movement, I remember her every heartbeat, her - inside me. I still love her", she says. Armineh cannot have babies anymore, because of the abortion. Now in her thirties, Armineh’s eyes swell with tears and hands tremble as she tells the story”. [165] These stories are among tens of thousands. The practice is even unacceptable for most fervently pro-choicers who “are distressed by late-term abortions, partly because of the risk, inflicting pain, and partly because the late-gestation fetus is so close to being a full-

[165] The Armenian Weekly, *The Baby Doom: Selective Abortions in Armenia*, Posted by Nanore Barsoumian on November 23, 2011, http://www.jnews.am/en/unborn-daughters-armenia (accessed at August 17, 2012)

term infant that all of the reasons for social protection of infants are present."[166] This predominant issue needs to be addressed by all sectors of the society including the government, church, health organizations, social and cultural workers, NGO's even political and benevolent organizations;

1) *Legal* - Besides the fact that it is condemnable on the moral, ethical, theological, social grounds and violates the basic human or women's right, it is also illegal. The law in Armenia on Reproductive Health and Reproductive Human Rights confirms the legality of induced abortion up to 12 weeks of gestation, whereas to identify the gender of the embryo takes 16 to 24 weeks of gestation.[167] Therefore, it raises unanswered questions about the moral stance as well as the motives of a physician-provider and speaks volumes about the general understanding of the role of bioethics in the health environment. In view of this fact, the causes and reasons behind distorted sex ratios at birth has to be thoroughly investigated. The sex ratio at birth should be collected; its development should be monitored and prompt action should be taken to tackle possible imbalances. Research on sex ratios at birth among specific communities has to be encouraged. The impact of campaigns, laws and policies and, first and foremost, the implementation of laws and policies on gender equality should be monitored and analyzed. The social and family pressure placed on women not to pursue their pregnancy because of the sex of the embryo/fetus is to be considered as a form of psychological violence and the practice of forced abortions ought to be criminalized.

2) *Ethical or Bioethical* - Biomedical technology is one of the aspects that is

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[166] Bonnie Steinbock, *Mother-fetus conflict, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, p. 136.

[167] See http://social.jrank.org/pages/504/Pregnancy-Fetal-Development.html (accessed at August 17, 2012)

being wrongly utilized. According to some statistics the abnormal gap between male and female births became noticeable in the 1990s, coincidentally during a time when ultrasounds became available in the country. As observed by Paul Robinson "the conditions identified in prenatal screening also display greater diversity than one might at first assume. Such screening need not be directed at disease. Gender has been and continues to be, screened for in communities where certain religious needs, and socio-economic advantages, are met and arise out of the birth (typically) of a son".[168] It should not serve as a tool to decide the future of the embryo on sex selection and its termination but rather as a procedural means and assistance during pregnancy. Therefore, there has to be a careful examination and research on the causes of prenatal sex selection and its social consequences. Thus, it requires education and training of medical staff on prenatal screening and its harmful consequences.

3) *Social* – According to Census and Demography Division at NSS, more than 43 thousand children were born in 2011, of which more than 23 thousand were boys, while the number of girls was 20 thousand. The experts warn that such a difference in numbers accounts for female abortions.[169] It creates population imbalance and demographic change, which is likely to create difficulties for men to find spouses and is a serious human rights violation. Without drastic measures, the future is uncertain and it is more than likely that Armenia will experience a female deficit. Therefore, all interested parties have to mobilize their efforts to raise the status of women in society and ensure effective

[168] Paul Robinson, *Prenatal Screening, Sex Selection and Cloning, A Companion to Bioethics*, Ed. By Helga Kuhse and Peter Singer, Blackwell publishing, 2007, pp.173, 174, 175, 182.

[169] Youth in the 21 Century: Debating and Producing Media; International Debate Education Association, by Mariam Mkrtchyan, Mariam Sargsyan, Mery Zohrabyan, Ofelia Tovmasyan, Lala Artsruni, March 7, 2012, http://archive.idebate.org/youthmedia/?p=319 (accessed at August 17, 2012)

implementation of laws and policies on gender equality and non-discrimination. It is absolutely imperative to raise public awareness to the issue of the discriminative approach at birth; each child has an equal right to life.

4) *Education/promotion/awareness* – Some anthropologists and physiologists mention that the problem is not an Armenian phenomenon but just an unfortunate legacy of the USSR. However, as I have mentioned earlier, there is a general absence of promotional and educational materials in the entire health care system and the efforts to fill the gap are mostly fragmented and uncoordinated and this issue is not an exception. Therefore, it requires a coordinated and well-organized approach and campaigns to initiate and implement programs that would promote and raise public awareness on the harmful consequences of the sex selection. The programs should stimulate the interest of the media for a longer period to draw public attention and spark debates on the issue. It also requires the adoption of a long-term strategy involving various sectors of society; spiritual, medical, social and political, to create a national platform introducing solutions to encourage Armenia's societal and family interests, norms and aspirations.

It is, indeed, very shocking and devastating to see that under the banner of human rights and autonomy the practice of abortion-killing and the worst articulation of it - the sex selection - is widely performed in Armenia. Surprisingly, there is not much ratio difference between urban or rural areas, wealthy or poor, educated or uneducated layers of population. Some findings reveal that highly educated women, with a comfortable salary, were most likely to choose to terminate unborn female pregnancy.[170] Therefore, it

[170] The Armenian Weekly, *The Baby Doom: Selective Abortions in Armenia*, Posted by Nanore Barsoumian on November 23, 2011.

indicates that the economic conditions play a very little role and the real problem consists in specific approach to terminate the sex and not the fruit. This is an alarming state that the country is in. At this pace it is believed that Armenia will have a shortage of women in the future. This is a new form of "genocide" or "gendercide" that pervades not only Armenia, but humanity as a whole. In this respect, according to the British medical journal "The Lancet", it is estimated that some 12 million sex-selection abortions had taken place in India from 1980 to 2010. The shortage of women has become so acute that it has led to "wife-sharing" and "a study of the sex imbalance in India, China, and South Korea links the absence of potential wives to increased aggression, violence, and criminal behavior among men". [171]

In my opinion, this phenomenon is the consequence of the changing system of values and has to be analyzed on the broader scale of secularization and commercialization of the human being, resulting in the person no longer being treated as a being but as a product amongst other goods. The dignity of personhood is reduced and cheapened to the level of an undefined existence living under constant threats and fears, with an uncertain future, destiny and meaning surrounded by relativism, permissiveness and bombarded by the new religion of "human rights". We live in a world of investigations, inquiries and discoveries, with immense technological and scientific advancement. Often as a consequence, we are faced with enormous ethical and moral challenges, where one is obliged to make choices and naturally seeks answers to all these

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[171] http://www.lifesitenews.com/tag/armenia, (accessed at August 17, 2012) http://www.lifesitenews.com/news/consequences-of sex-selective-abortion-increased-aggression-violence-and-cr/ (accessed at August 17, 2012), http://www.lifesitenews.com/news/ban-sex-selective-abortions-in-the-usnow/ (accessed at August 17, 2012).

issues. These choices eventually lead us towards the quest for the meaning of life and the goodness in humanity. They also direct us towards questioning, as well as attaining intelligent knowledge about the character of the universe and of the primary source of our moral and intentional consciousness. The essence of human good is very much dependent on either the progress or the decline of individuals, which in itself is the cause of or effect of social progress or social decline. The decline occurs because of human disregard and negligence of the very basis of transcendental absolute principles of attentiveness, intelligence, reasonableness and irresponsibleness, which essentially have an impact on and corrupt the society or social good. Contrarily, progress is achieved when there is an authentic desire for self-transcendence and profound realization of self-sacrificial love, which "will have a redemptive role in human society inasmuch as such love can undo the mischief of decline and restore the cumulative process of progress".[172] Because of our natural sense of quest, we seek answers and this constant and unending search inevitably leads us towards theological reflection.

In the next chapter I will recapitulate the Christian understanding of medical science and the importance of the contribution of theology and bioethics in the health care system in Armenia, the theological approach of sick and sickness, the sacrament of healing, the importance of spiritual counselling on biomedical issues particularly in decision making and judgment.

[172] Bernard Lonergan, *Method in Theology*, University of Toronto Press, Toronto, 2007, p. 55

Chapter 3
Theological Perspective

3.1 *The Contribution of Theology in the Health Care System in Armenia*

In the previous chapters, based on the available information, I attempted to present the overall picture and understanding of health care in Armenia; its ancient and medieval practice and social orientation, the current status and its challenges, evaluation of its performance from the ethical perspective, and highlighting a specific issue related to reproductive health. This thesis did not intend to assess the health system from the theological standpoint, especially that of Orthodox theology. Therefore, this chapter aims to provide foundational and conceptual patterns of Orthodox theology while reflecting upon bioethical issues. Consequently, this chapter will serve as a general conclusion to the preceding analyses, as well as a direction towards ethical decision-making around Armenia's health care system, from the Armenian Orthodox perspective.

Historically, the Armenian culture, its self-realization and self-expression, is interconnected and strongly identified with the Armenian Church; her history, theology, doctrine, teaching, liturgical and canonical understanding, spiritual and moral witness and vision. Needless to say, Armenia was the first nation to embrace Christianity as the religion of the state and very soon made it as natural as "the color of the skin".[173] Many historiographers have described Armenian history as "martyrology". Accounts of suffering, persecutions, destruction, massacres, deportation or forced emigration,

[173] Yeghishe, *The History of Vardan and the Armenian War*, tr. by Robert W. Tomson, Cambridge, Harvard University Press, 1982 pp. 154-155.

genocide, continuous crises and upheaval appear on almost every page of centuries-old annals of the Armenian people. It has shaped the spiritual identity of the nation and formed the ethical-moral perception and system of values through the *practical theology* – the theology of the cross – that assumes sacrifice, suffering, compassion, fellowship, faith, hope and love. In other words, faith has played a central role and has been a decisive factor in the making of the nation.

Interestingly, despite her rich spiritual and cultural heritage, the Armenian Church has not yet developed a systematic or doctrinal approach towards health care and bioethical issues, but has reflected on these concerns, from time to time, through its canonical declarations or, at best, through the works of church fathers and theologians. The social concept or social doctrine of the Church is at the inception stage and this thesis could be considered as one of the first attempts in the field of health care and bioethics. Yet, on the other hand, theology and science, particularly medical science, have been developed naturally within the church life having an inseparable common history and a history of cooperation.

As illustrated in the first chapter, the Church, at all times, has been concerned by human health, both spiritual and physical. Several implications arise from the perception of the Armenian Church regarding bioethics; from her comprehension of science, in general and medical science, in particular. It highlights the very close interrelation of theology and science but also the clear distinction between the two disciplines. It is undeniable that medical science was born within the church environment and was one of the primary concerns of theologian-physicians, who practically performed their medical duties alongside their spiritual ministry. The beginning of shelters and houses for the poor

and the disadvantaged, hospitals and gathering places for the sick, financed and administered by the monks and priests, are the highest testimony of fundamental principles of Christian charity and love, expressed by the Church's social or bioethical dimension and mind, as the core value of the teaching of her Founder. The health care of the individual and the nation have enjoyed the highest patronage of the Armenian Patriarchs. However, science was (and is) understood as not only lawful and important, but also as a necessity. The encouragement for the separation of religion and science, and in the Armenian Orthodox tradition, the importance of the experimental study of nature was advocated long before the western *"Renaissance"*. From this point of view physical health would not be considered significant without the spiritual aspect, thus stressing the integrity of the personality; the unity of body and soul. The Church has constantly taught that physical health is not self-sufficient for it is only one component of human integrity. And, in this respect, science is not able to respond to the needs of the spiritual dimension of human existence, to serve as a tool to enter into its transcendental reality. It originates from the all-encompassing ministry of Jesus Christ where preaching and healing, words and deeds were inextricable. If this is true, then how does theology, or on this particular instance, Christian faith, respond to the questions of our modern times, to the issues in the realm of bioethics? Which spiritual and moral values have to be respected and protected in this age of incredible technological advancement and social demands, considering that neither biblical anthropology nor Sacred Tradition had encountered? Therefore, first we need to establish the bioethical discipline, its field and primary concerns, its place and limitations in the world of limited resources and informed consent, increasing medical needs, vast information, relativism and reductionism, where

health care is subjected to the laws of the market place with the inevitability of injustices, where the sense of responsibility is subdued to the rights, where there is a massive current through media and entertainment industry to reduce the person to the level of a mere physical or material object, attacking human dignity and responsibility, where the bioethical discipline itself is infested by the socio-economic interests rather than deliberated from the theological or spiritual perspective.

Bioethics came into existence in response to the technological advancement, medical tools and its modus operandi, concerned with human life on its physical and biological level. It focuses on the spheres of the beginning of human life, preserving and sustaining it, and the end of life. Professor Jamieson eloquently describes "the drama of human existence as it is played out every moment in the world of medicine in the 21st century. The complexity of the questions and ethical difficulties is staggering…we are faced with an enormous range of difficulties and challenges. In many cases, ethical questions emerge precisely because medical and technological advances relentlessly move forward. The ingenuity of human action outpaces our capacity to think about what we are doing".[174] That is why "the offspring of modern medical technology, the field of bioethics focuses particularly on biological and medical issues of philosophical and theological import, in order to bring to those issues insights and judgments that are both pertinent and just. The value of those moral judgments will depend wholly on the presuppositions that undergird them".[175] Therefore bioethics needs theology; moreover "by its very nature it is

[174] Christine Jamieson PhD, *The Ethical Challenges of Medicine Today: Drawing on the Wisdom of Vatican II*, paper presented in Lonergan workshop in Boston 2012. (Publication is forth-coming)
[175] John Breck, *The Sacred Gift of life: Orthodox Christianity and Bioethics*, St. Vladimir's Seminary press, New York, 2000, p. 257.

theological".[176] It is about the human being, about its existence and role, capacity and ability of decision-making. It is about the constant quest of knowing and doing, experiencing its conversion on personal, as well as, communal or social levels. It therefore "reflects on the intrinsic values of human life, as it does on the means by which biomedical technology can properly serve life's ultimate end: our participation as human *persons* in the *personal* life of the Triune God".[177] Thus, its true value is in our constant response to the love that emanates from God as His gift to us and as a means to encounter with His creation. It certainly discloses the essential values of human good and drives us to investigate, to inquire and seek understanding of the knowledge of Truth. This is the capacity that we possess internally, which becomes a reality when we are in love - love in all its forms, the love for God and our neighbor – the power and the basis of our conscious intentionality. While analyzing the foundations and the inter-relatedness of bioethics and theology and their practical application, John Breck insists that "the moral and spiritual values we need to respect and to protect in all our reflection in the area of bioethics include the following: 1) *the sacred character of human life*, which is to be acknowledged and preserved from conception to the grave and beyond; 2) *the sacrificial love of God*, as the origin and basis of every human relationship (for example, between the physician and the patient, or between the organ donor and the organ recipient); and 3) *the call to holiness and to theosis*, participation in divine life, which alone provides ultimate meaning to human existence and serves as its ultimate end".[178] It has to be noted that for the "secular man" this may seem very unrealistic, un-pragmatic and an abstract philosophical substantiation, having no real connection with the realities of life. But these

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[176] Ibid. p. 244.
[177] Ibid p. 244
[178] ibid p. 245

are the core aspects and values that determine and form our attitude in dealing with biomedical issues and challenges, which in reality enhance the process of our moral decision-making. It is a process that is not “merely the service of man; it is above all the making of man, his advance in authenticity, the fulfillment of his affectivity, and the direction of his work to the particular goods and the good of order that are worthwhile”.[179]

In the first chapter I have already presented the general understanding of health care and its criteria regarding the social and ethical understanding of Armenian medieval physicians and theologians, the moral code of the doctor, doctor-patient relationship and the importance of medical care from the Church’s perspective. In this section, I will further reflect upon the basic principles from the perspective of the Orthodox theology, how those principles are understood and proclaimed based on the ethical judgments of the Bible and the Sacred Tradition, and how they may contribute to the wellness of the health care system and medical science in Armenia in light of the present state that is illustrated in the previous chapter. Indeed, there should be a holistic, organic, inclusive perspective to this view and it has to serve as a resource and foundation without underlining any specific issue.

1. *God as Trinity* – The Trinitarian affirmation of God is the principal source of orthodox Christian theology and ethics. In His ontological inner being God is a communion of Three Distinct Persons –“*community of ousia*”. The Holy Trinity Himself is a relationship between the three Persons each of Them having His own attributes. There is no dissolution, subordination and confusion, but a total unity in relationship as

[179] Bernard Lonergan, *Method in Theology*, University of Toronto Press, Toronto, 2007, p. 52

one and many at the same time, united in an interconnected relationship through love: “God dwells as communion within a community and Christ Himself becomes revealed as truth not *in* a community but *as* a community”.[180] As we shall see this Trinitarian mode of existence is crucial in defining the human person, his character and nature as a communal being. Therefore, “since God is by nature a community of persons, human life can find fulfillment in a communal and community existence”.[181] This community is a new mode of existence, a way of being, that is called to live, work and worship in divine reality with responsibility and certain ethical criteria, which generates a particular self-understanding and form of life. It shapes the Christian life of communal fellowship as a distinct call and mission, contrary to the emphasis on individualism and individual rights of the modern world. Thus, it lives and acts *in* and *for, with* and sometimes *against* the world as a community of love, consisting of *individuals* and *persons* in the reflection of the Holy Trinity as many in one essence - as a community of persons in an organic relationship. This existential reality is embedded in the Johannine Proclamation of the Trinitarian ideal unity and oneness, as an eternal community in love and freedom: “I in them, and You in Me; that they may be made perfect in one, and that the world may know that You have sent Me, and have loved them as You have loved Me”.[182] God Himself being communion does not desire a history of individual human beings, but the history of the human community. Nor does God want a community, which absorbs the individuals into itself, but a community of human beings. In God's sight community and individual are present in the same moment and rest upon one another. It is the

[180] John D. Zizioulas*, Being As Communion*, Darton, Longman and Todd, London, 1985, p. 115
[181] Stanely S. Harakas, *Wholeness of Faith and Life: Orthodox Christian Ethics, Orthodox Social Ethics, III*, Holy Cross Orthodox Press, Brookline Massachusetts, 1999, p.92.

[182] John 17:23.

profoundest expression of a gathering of people "who are able to sustain through the inevitable tragedies of our lives. They are able to do so because they have been formed by a narrative, constantly re-enacted through the sharing of a meal that claims nothing less than that God has taken the tragic character of our existence into His very life".[183] It is the dynamic relationship of God with His people and intense preparation of fallen humanity for the supreme revelation of God through the Incarnation of the Son of God to heal and reconcile the ruptured humanity in His intimate, original and natural fellowship.

2. *Mariology* - St. Mary undoubtedly occupies the highest place in the history of humanity as *Theotokos* -the one who gave birth to God.[184] In fact, the second and new creation, the *evangelismos* of humankind, starts with the Mother of God being the fulfillment of the ultimate promise of God to restore humanity in its original status. It would have been hard to understand Christianity as a natural and profound encounter between God and human being, between the Creator and the creation had there not been the all-embracing figure of Mary. Through her obedient love, she embodies the "*theology of love*" as a tangible reality "the one who has always stood at the very heart of the Church's life as the purest expression of human love and response to God".[185] As far as the theology of St. Mary is concerned, it embraces the whole Church, above all, as the Mother of Ecclesia, being the heart of Christological doctrine, liturgical understanding and eschatological hope. In other words, Mariology is the axis of salvation and is not a subjective devotion but rather an objective Christian understanding, which is integral to

[183] Stanley Hauerwas, *A Community of Character*, Univ. of Notre Dame press, Notre Dame, London, 1981, p.108.
[184] The Armenian word *Astvatsatsin* is the exact translation of Greek Theotokos. Interestingly, the name Mother of God occurs very seldom in the Armenian Orthodox tradition.
[185] Alexander Schmemann, *For the Life of the World*, St. Vladimir's Seminary Press, Crestwood NY, 1998, p. 83.

the history of humankind that has been realized through the Incarnation of the Son of God. The Incarnation is not merely the work of the Divine power. It is the most eloquent expression of the co-operation between God and human being in freedom and obedience, which produces the perfect example of the blessedness and fruitfulness of that relationship. Thus, She becomes the symbol of the Church that operates through the Grace of the Spirit in active participation in Christ, carrying the whole human race *with* and *in* her Motherhood as "partakers of divine nature". As St. Mary bore the Son of God in her womb physically all members of His Body are realizing the perpetual epiphany of Christ spiritually[186] and therefore "it is in Mary–the Woman, the Virgin, the Mother - in her response to God, that the Church has its living and personal beginning".[187] The illustrious image of the Woman and her struggle in the Book of Revelation (Rev. 12:1-17) brings her in the centre of the Last Things as the "archetype given by God to humanity struggling towards the creation of the new human person in Christ and in His Church".[188] The image of the Holy Mother of God is the most natural phenomenon inside, as well as outside the Church. At least two of her features can be central in providing a direction in the formation of moral values in the field of bioethics; a) the innocence of virginity – the sacredness of sexuality as the highest expression of love b) supremacy and holiness of motherhood – in reproductive health issues such as abortion and related aspects. There is certainly another aspect that can serve as a role model for

[186] see *Divine Liturgy of the Armenian Apostolic, Orthodox Church*, tr. Tiran Arch. Nersoyan, St. Sarkis Church, London, 1984, p. 72: "...Father almighty, who didst remove the hindrance of the curse by thine imponderable Word, thy co-creator, who having taken the Church to be a people unto himself, made his own those who believe in thee, and was pleased to dwell amongst us in a ponderable nature, according to the dispensation through the Virgin, and as the divine master-builder building a new work, he thereby made this earth into heaven".
[187] Alexander Schmemann, *For the Life of the World*, St. Vladimir's Seminary Press, Crestwood NY, 1998, p. 86
[188] Hans Kung and Jurgen Moltman, *Concilium, Mary in the Churches*, T&T Clark LTD, Edinburgh, The Seabury Press, New York, 1983, p. 70.

health care providers in treating patients. It is her boundless love, care and compassion towards humanity.

3. *The Incarnation* – Most of the doctrinal controversies have arisen concerning the incarnation of the Son of God related to the unity of His divine and human natures. However, besides the theological disputes and debates, it represents the greatest ethical model in bioethical decision-making "which looks at the wholeness of human life, and the interpreting, mutually supportive mutually illuminating assessment of ethical questions from both the spiritual and the scientific perspective".[189] The Incarnation event, as a direct interaction, shapes the new understanding of community, being the act of recreation; of remade and redeemed humanity as a result of God's grace. It is the manifestation of God's will and purpose for fallen humanity, which is not an abstraction for there is a concrete place – *the community* – whose purpose is the creation of a form of life where victory, sacrifice and justice are celebrated and realized. The fundamental and radical approach to the newness of life is expressed in the sacramental life of the community and in the dialectical relationship between God and the world, between the *eschata* and history. It makes a new creation and complete participation in the new identity of human existence, a "life worthy to God"[190], guided by the Holy Spirit[191] in the "new mode of human life, the new ethos which has a Godlike or Christ-like character, or more precisely a theocentric or Christocentric character".[192] The community is called out

[189] Stanely S. Harakas, *Wholeness of Faith and Life: Orthodox Christian Ethics, Orthodox Social Ethics, III*, Holy Cross Orthodox Press, Brookline Massachusetts, 1999, p. 94
[190] 1 Thess. 2:12
[191] see John 16:13
[192] Panayiotis Nellas, *Deification in Christ*, St. Vladimir's Sem. Press, NY, 1997, p.146.

to be the ecclesia-Church to live in three decisive dimensions as people of God[193], bride of Christ[194] and body of Christ.[195]

4. *The Body of Christ; the Church* - The Church as a divine and human corporeal reality is rooted in God's revelation in Christ. It is in this unique character of the Church's moral understanding as a community that the Gospel word is proclaimed and sacraments are celebrated. The principle of this new humanity is that free, loving, self-giving act of Christ on behalf of others, being-with-each-other, working for the neighbor, intercessory prayer, and finally the mutual forgiveness of sins in the name of God. Thus, the Church or the community of human beings, receives not a static situation but dynamic and transforming character, in which the participants live the life of love, faith, hope, in freedom and joy, feeling the presence of God and rendering it to the world and being-for each-other, that is, being Christ to one another, self-renouncing, active through her sacramental essence, through her worshipping character and discipleship, not merely for the forgiveness of sin but for the renewal of life and for the eternal *salvation* in the Kingdom of Heaven in the ontological and personal communion with the Holy Trinity.[196] Therefore, the Incarnation of the Son of God is concerned with not only saving *from* but also *for*, so that the community "may realize in itself the truth of Christ in the form of faith, hope and love, as a foretaste of eternal life, making it aspire towards the transfiguration of the world within this communion which the Church herself experiences".[197] Therefore, the main task of Christian community is to make this Kingdom a reality in the world, which is not a passive state and rejection of or escape

[193] Rom. 9:8
[194] Eph. 5:26-32
[195] 1 Cor. 3:21-23, 12:12-31, Eph. 1:21-23, Col. 1:18.
[196] Gal. 5; 6
[197] John D. Zizioulas *Being As Communion*, Darton, Longman and Todd, London, 1985, p. 114

from the world, but rather the *transformation* of it; not a change of *place* but a change of existing behavior. In the Incarnation, by His obedient death on the cross and resurrection, "God has in fact redeemed the world, even if the world refuses to acknowledge its redemption. The Church can never abandon the world to the hopelessness deriving from its rejection of God, but must be a people with a hope sufficiently fervid to sustain the world, as well as itself".[198] The Church of Christ, graced by her Divine Founder with every gift of the Holy Spirit, has been, from the beginning, a community of healing, and today too, in her rite of confession she reminds us about the need of being healed. We know that the representatives of ancient medicine were in the community of saints and demonstrated a special example of holiness. The medical calling was embraced as a Christian duty of mercy. This ecclesial approach can serve as a perfect example for the doctor-patient relationships and in bioethical decision-making built on respect for integrity, free choice, and dignity of the person. Although there is a tendency to reduce doctor-patient dialogue purely to the contractual level, that relationship has to be encouraged and enhanced as a significant value of Christian Church tradition, with its caring approach to the patient, determined by the morality of the doctor. The ecclesial reality may also serve as an extremely useful tool for the paramount issue of resource allocation and distributive justice in this world of scarce resources and as a system for medical social care. In the ecclesial setting it is apparent that, to use the medical term, it is a "patient-centered" care, based on the social and distributive justice notion where all members are equal and have the same value in sharing. Therefore, even in the situation of limited medical resources, health care should be fully effective and accessible to all members of society, regardless of their financial means and social status. Thus, to truly,

[198] Stanley Hauerwas, *The Peaceable Kingdom*, SCM Press LTD, London, 1984, pp. 100-101

fairly and justly distribute the resources, the principle of vital needs should have priority over market relations.

5. *Sacraments; Sacramental life* - In light of above-mentioned theological aspects, the sacramental nature of the Church, as the policy of the Kingdom of Heaven, brings the community into the ecclesiastical actuality in which mysteries are celebrated, the universal kerygma of the Gospel takes place and virtuous and holy life is nourished. It is in the sacramental life and living that the story of Jesus Christ is enacted and forms a community in His image, "for the story of Jesus is not simply one that is told, *it must be enacted*".[199] Such a people who share in Christ's death and resurrection are incorporated in Him, by His Spirit. They are made part of His Body as "*incorporation into the community*."[200] It marks the moment where reflection ought to begin, for in this event the human being embarks on the life and discipline of discipleship and is called upon to abide and build a people of a certain character and integrity. Christ's proclamation "Make disciples of all nations, baptizing them in the name of the Father, and of the Son and of the Holy Spirit"[201] lays the fundamental ground to form "from out of ordinary existence, through a radical conversion from individualism to personhood".[202] It lays the foundation of a Christian "philosophy of life", of a permanent sense of direction.[203] Thus, Christian moral practice and ethics is based on a doctrine of freedom,[204] and is maintained throughout liturgical and sacramental life of the Church. It not only constitutes the life of

[199] ibid. p. 107
[200] John D. Zizioulas *Being As Communion*, Darton, Longman and Todd, London, 1985, p. 113
[201] Matt. 28:19
[202] John D. Zizioulas, *Being As Communion*, Darton, Longman and Todd, London, 1985, p. 113
[203] Alexander Schmemann, *Of Water and The Spirit*, SPCK, London 1976, p.7-9, see Oliver Chase Quick, *The Christian Sacraments*, London, Nisbet & CO. LTD. 1927, p. 161, F.C. Conybeare, *Rituale Armenorum*, Oxford, Clarendon Press, 1905, pp. 106-107, Oliver Clement, *The Roots of Christian Mysticism*, New City, 1997, p. 10
[204] Rom. 6:17

the Church and the communion of a people among themselves, but directs the tendency and inclination in which this community is present in the world, "giving thanks in all circumstances".[205] Stanley Hauerwas precisely describes the sacramental essence of the Church: "The Lord's Supper is a sanctifying ordinance, a sign of the continuity, necessity, and availability of God's enabling, communal, confirming, nurturing grace. Our characters are formed and sanctified, by such instruments of continual divine activity in our lives".[206] Through this sacramental living Christian morality and practice is based on the *remembrance* - history, *transfiguration – theosis*, deification and fulfillment in the Kingdom of Heaven – participation in divine life and reconciliation. In other words, while living in this world, the community lives "in accordance with the eschatological nature of community"[207], carrying out the promise of the age to come, of a new age, being people on the way. Sacramental mysteries pattern the moral categorical imperative of the Church, forming specific behavior of Christian community. The fact of the "reasonable worship, holy and acceptable to God"[208] provides adequate and genuine perspective for the proper "conduct in the household of God".[209] It is within the worship that Christian practice and ethic is created by implication of "sacrifice and service of faith"[210] as a consistent realization of "the very image of the things"[211], for it produces the "straight path"[212] to the approaching Day.[213]

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[205] 1Thess. 5:18
[206] Stanley Hauerwas, *The Peaceable Kingdom*, SCM Press LTD, London, 1984, p. 168.
[207] John D. Zizioulas, *Being As Communion*, Darton, Longman and Todd, London, 1985, p. 205
[208] Rom.12:1
[209] 1 Tim. 3:15
[210] Phil.2:17
[211] Heb. 10:1
[212] Heb. 12:13
[213] Heb. 10:25

From the Pauline perspective, there are two essential principles for the proper conduct in the household of God; a) living and acting for one another[214] b) submitting to one another in the fear of Christ,[215] that is “the Church is called to be the echo of the very being of God, and is enabled to be so as it is taken up in worship into the life of Trinity...it also has responsibility for the life of creation as a whole” and therefore the Church praises “on behalf of the whole creation...In one sense, the Church has nothing to do but praise, when that word is used to characterize not just the particular acts we call worship, but a whole way of being in the world".[216] In essence, that which happened to Christ happens to Christians, as a life of sharing in Jesus Christ's life of salvation.[217] Therefore “to be a disciple is to be part of a new community, a new polity, which is formed in Jesus' obedience to the Cross”.[218] Defining Christian moral practice as theology of the Cross, actually sheds light on the entire doctrine of Salvation and consequently, "any proposal about the Christian life is not just a group of ideas about how we might live, but a claim about how we should live if we are to be faithful to the God of Israel and Jesus".[219] It is the continual commitment to the virtues that make up the community of holy people - saints[220], who follow the example of God in love towards enemies and brothers alike,[221] having the freedom of faith, being in loving service and

[214] Rom. 12:3-5, 1 Cor. 12:3,
[215] Eph. 5:21, Phil. 2:3
[216] Colin E. Gunton, *The Actuality of Atonement*, T&T Clark, Edinburgh, 1994, p. 200
[217] see Michael Schmaus, *The Church as Sacrament*, Dogma 5, Sheed and Ward, London, 1981, p. 152, *The Ante-Nicene Fathers*, Alexander Roberts and James Donaldson, T&T Clark, Edinburgh 1995 Vol. 1 p.183-185,
[218] Stanley Hauerwas, *A Community of Character*, Univ. of Notre Dame Press, Notre Dame, London, 1981, p. 49
[219]Stanley Hauerwas, *The Peaceable Kingdom*, SCM Press LTD, London, 1984, p. 149
[220] John. 1 Cor. 6:11, 1Tess. 4:3-8, 1Pet. 1:14-16
[221] Matt. 5:43ff., John. 13: 15, 34-35; 15:12-13, 1 John. 4:7-11

self-sacrifice,[222] patient to suffering,[223] having the obedience and humility as Christ Himself manifested on the Cross,[224] hope in God's justice and the world to come, by which God originally created the world and now recreates in Christ.[225] Thus, the calling of the Church as a community of theocentric humanity is "to be those who learn to live in the creation as creation, as gift: in the space won for the life of the world by the victory of Jesus...that is God's and not ours, or rather ours only because it is God's: that He, through the Incarnation, Cross and Resurrection of Jesus creates and gives space for human life to breathe and grow".[226]

As mentioned earlier, doctor's code of conduct is of absolute importance, as the calling of the doctor was perceived as a channel to convey the grace. It is not a mere profession but more than that. It has a sacramental character whose highest model of physician is Jesus - the Physician and Healer – who performed the healing for both the body and the soul; the visible physical and the invisible spiritual healing.[227] It is noteworthy that in her sacramental system the Church has given a special significance to the sacrament of healing –the Sacrament of the Anointing of the sick, which in the Armenian Church was never performed as a preparation for death, but rather for the physical and spiritual well-being. It demonstrates the Church's approach to the holistic and authentic healing as a vital aspect of her understanding of health care, accomplished in the Church of Christ through participation in the Sacrament. The character of this mystery is that the Church's spiritual care in the sphere of health care lies fundamentally

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[222] Luke. 22:26-27, Gal. 2:20, 5:13; 6:14
[223] 2 Thess. 3:5, 1 Pet. 2:21-5
[224] Phil. 2:1-8, Heb. 12:1-3
[225] Matt. 5:19, Rom. 3:21-28; 5:1
[226] Colin E. Gunton, *The Actuality of Atonement*, T&T Clark, Edinburgh, 1994, p. 182-183
[227] Nerses Shnorhali, Hovhannes Yerznkatsi, *Commentary on the Holy Gospel According to St. Matthew*, Constantinople, 1825, p. 85, also, see Barsegh John, *Commentary on the Holy Gospel According to St. Mark*, Constantinople, 1826, p. 450.

in the proclamation of the word of God and offers the grace of the Holy Spirit to all those who suffer. [228] It is therefore, not only the duty of the clergy, but also of the medical workers as a calling to console the suffering, which is a consequence of not only sin, but also is the general distortion and imperfection of human nature and as such should be endured with patience and hope with pastoral, as well as medical care. The sacramental identity or vocation of the doctor is extensively expressed in the writings of the Armenian theologians. While they recognized the significance and the importance of medical knowledge as the means to heal the sick through the physician, they associated medicine with life and its final healing through the grace of God. In this respect the doctors must be morally sound, wise, insightful, counsellors, shown love for the poor, merciful, devoted, faithful, God-loving and holy. It is noteworthy that the doctor was likened to the role of father confessor.[229] Therefore, the primary understanding of the church's sacramental healing or healing as a sacrament is the restoration of humanity in its natural place. It is the reconciliation of ruptured humanity as healing in a broader and deeper sense, against the corrupted world and sin, which is the central principal - the heart of Christian understanding of healing and health.

6. *Image and likeness of God* – Perhaps this affirmation occupies the most central place of Christian understanding in approaching the biomedical issues concerning the beginning and the end of human life. Particularly, in the world of secularization and consumerism, relativism and reductionism, this stands out as the most conflicting absolute that constitutes the foundation for treating the human being as a person and not

[228] See Bishop Bagrat Galstanyan, *The Question of the Anointing of the Sick in the Armenian Church*, Etchmiadzin, 2011, p.99-100.
[229] Bouniat of Sebastia, *Book of Medicine*, (17th century) by D. Karapetyan, Yerevan, 1987, p.59, see also See Stella Vardanyan, *History of Armenian Medicine*, pp. 6-7.

as an object. The claim that humans are made in the image and likeness of God is the biblical and Christian anthropological basis of human dignity. It is "in the image and likeness" of God (Gen. 1:26), that human beings are created, therefore the beginning and the end of human existence finds its self-realization in God. The whole life is dedicated to restoring the fallen creation into communion with God, thus reinstating a new cosmological and anthropological order.[230] It establishes the unique Christian anthropology, which restores the fallen Adam in union with God through the grace, in the constant movement towards *theosis* -deification as the ultimate end of human being.[231] Therefore, the real existence of humanity as rational being finds its meaning only in the image and likeness of God, Who reveals Himself through the Incarnation of Logos.[232] Thus, the ultimate goal of human existence is to be found in the quest for *theosis* - deification: eternal communion that determines our relationships with other persons, as well as with God. It is the purification or, rather, Christification of the mind and human intellect. Only the deified mind is able to grasp and co-operate with God, hence the total renewal of the fallen humanity and creation. The knowledge of God in every aspect transforms the intellect into the ontological sphere and harmonizes the whole cosmos, in

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[230]see Vladimir Lossky, *Orthodox Theology*, St. Vladimir's Seminary Press, New York, 1989, pp. 74-78

[231] see *Nicene and Post-Nicene Fathers of The Christian Church*, by Philip, Schaff and Henry Wace, T&T Clark, Edinburgh, Volume V, *The Great Catechism of St. Gregory of Nyssa*, XXV, p. 494. Dietrich Bonheoffer gives a very profound interpretation in defining the Incarnation as the humanization of the human race. It is about restoring and redeeming to its true but lost nature in community with God and fellow human beings. He states that God became human in order that the human might become human. Dietrich Bonheoffer, *Ethics*, Macmillan, New York, 1965 pp. 82-83. It is an ostensible departure from the most exalted patristic definition of the Incarnation that God became human in order to human become divine. However, it also may indicate that the more humanity is being humanized the more it obtains its true and lost nature created in the Image of God, therefore humanization is about the deification of the human race.

[232] As St Athanasius of Alexandria states: "He did not barely create man as He did all the irrational creatures on the earth, but made them after his own image, giving them a portion even of the power of His own Word; so that having as it were a kind of reflection of the Word, and being maid rational (logikoi), they might be able to abide ever in blessedness, living the true life which belongs to the saints in paradise". *Nicene and Post Nicene Fathers*, ed. by Philip Schaff and Henry Wace, T&T Clark, Edinburgh, Volume. IV, *Athanasius, On The Incarnation of The Word*, §3 p.37:3

which the only subject of humanity's thought is God Himself. This theological affirmation defines and determines human personhood, which is bestowed by God. As John Breck elaborates, "personhood may be considered the 'being in communion', with God and others that is constituted by 'the divine image' in which every human being is created. As such, it is characterized by a transcendent aspect that remains indelible, however much the person may succumb to the powers of sin and corruption".[233]

It is obvious that this foundational aspect is crucial for bioethics in ethical decision-making, especially in the field of the beginning and the end of life issues in particular, and in health care in general. It is when ultimate sacredness and dignity of the human person is in question. The perception that each person is created in the image and likeness of God and has a personal calling to achieve *theosis* entails that each "patient" has an indispensable and sacrosanct dignity as a person. It is, however, fully realized in the community and requires the care and concern of the healthy for those who are suffering. Therefore, particularly, for those working in the field of medicine, ethically, they should not perceive their responsibility as healers solely through a sheer professional or business perspective. Principally, in every medical procedure there has to be a basic respect for the patient as God's image and likeness.

3.2 *Concluding Remarks*

The Armenian Orthodox Church has always treated medical work with high respect as it is based on the service of love that is aimed to prevent and relieve people's suffering. It is clearly evident that despite being a spiritual institution, the Armenian Church's

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[233] John Breck, *The Sacred Gift of life: Orthodox Christianity and Bioethics*, St.Vladimir's Seminary press, NY, 2000, p.163.

approach has been holistic and has catered to the integral nature of the human being based on the Christian anthropology of the wholeness of body and soul: “May the very God of peace sanctify you wholly and may your whole spirit and soul and body be preserved blameless unto the coming of our Lord Jesus Christ”.[234]

I have underlined only a few aspects of orthodox theology in relation to bioethics and biomedical questions, clearly understanding that they cannot completely and precisely answer the questions raised by the fast advancement of medical technology and scientific discoveries and experimentations. In reality, theology should not have the aspiration to provide clear-cut decisions on those issues and challenges. Rather, it has to provide the spiritual and moral ground, the perspective and foundation, to enhance and support, to offer pastoral care and guidance to all those who imminently need and are closely involved with critical and clinical decision-making and moral judgments. From this perspective, it is true that, “the only possible reply to the question concerning moral and spiritual values to be protected in this technological age must be thoroughly grounded in biblical and patristic anthropology: the vision of the human person, created in the Image of God and called to grow toward actualization of the divine Likeness. Called to a life of authentic freedom: a freedom lived in God and for God, by the in-dwelling presence and sanctifying power of the Holy Spirit”. [235]

I acknowledge the fact that most of the subjects that I have discussed within this thesis may not be relevant to the current situation of the health care system in Armenia today. However, it does not necessarily mean that they do not exist in Armenia and

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[234] 1 Thes. 5:23.

[235] John Breck, *The Sacred Gift of life: Orthodox Christianity and Bioethics,* St.Vladimir’s Seminary press, New York, 2000, p.163.

certainly, in the future, some of the biomedical questions and challenges of global concern will require decisive answers from medical workers, ethicists and the Church. Today, the Armenian system is struggling with the implementation of the introduced reforms and the quest to find an appropriate system that could fulfill the general needs of the population, that is, to have fair financing, proper responsiveness and accessibility, which would satisfy public expectations from the health care system. However, without the change of behavior and mentality towards health care on both the professional and public level and without an ethical approach to the human dignity and personal and communal responsibility the objective of achieving a just and trustworthy health care performance cannot be achieved. That is the realm where the Armenian Church with her centuries-old historic wisdom, theology, liturgical tradition and pastoral guidance, being the "moral conscience" of the people, has to play a crucial role offering necessary aid and leadership in the field of health care. Historically and naturally, the Armenian Church has earned and attained the moral and spiritual authority to participate, in collaboration with state structures and concerned public circles, in the development of such a concept of national health care where every person would ascertain his or her right to spiritual, physical and mental health and social well-being. Therefore, it is very important that pastors, medical students, teachers and workers be introduced to the foundations of the Christian moral teaching and theology oriented biomedical ethics; the concern and profound respect for the human person and life as holy and as a gift of God, which is fulfilled in the community where life is sustained, nourished and developed.

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