Abstract: The reality is that soul and death are an integral part of human life. The soul is the essence of life. When the soul leaves our body leaving the body senseless that ultimately dissolves into the earth. Most of us are not aware of this and do not like to research on it even do not discuss it in lifetime. There is hardly any study on the soul. Western bioethics omits discussion on the soul, though they discussed “good death”. Only religion discussed soul elaborately specially Quran. No literature is available from Bangladesh. Therefore, the present study has been done to expand the body of knowledge on the soul in the light of current theory with a view to aware people for further research for understanding and comparing with the concept of philosophical, religious and medical variation.

Key words: soul, philosophy ethics, bioethics, religion, medicine

Definition of the soul: The soul is divine and immortal, is the self of a person.1 In evidence-based scientific inquiry, the soul is the life force, the theory of the functioning of physic in causal and categorical sense.2 Self or person is the identity, the reflection of knowledge of our beliefs, personality traits, physical characteristics, abilities, values, goals, and roles.3 According to contemporary social science, personality is cultural conditioning and biological make-up.4,5 Though soul and spirit usually are used as a synonym but there is little difference. In the Islamic religion, the spirit is the command of Allah, is our true entity, our being.6 The soul is boundless and immaterial, the self, the mind, our identity or consciousness.7 Mind is the conscious mental events and capabilities in an organism phenomenally it manifests feelings, desires, beliefs, thinks, and emotions and is the thought process that can be experienced and help in the survival chance of ourselves and our species.7 It is
act by non-material (soul) and material (Brain) as a unity. So the mind is the composite of the information-processing processes of the brain. Therefore, the mind is the synonym of the soul.

**Soul in philosophy:** Homer (800-701 BC) attributed the soul as a person or quasi-person that exists after death. He spoke soul only in the human beings which endures after a person’s death in the underworld. Thales of Miletus (611 BC-545 BC) proposed that the soul is a magnet, in the sense that magnets are capable of moving iron. Pythagoras (570–495 BC) thought that plants have souls like humans. Pythagoras described the soul consists of three parts—intelligence, reason, and passion. The seat of the soul extends from the heart to the brain, passion being located in the heart and reason and intelligence in the brain. Heraclitus (535-475 BC) agreed with Pythagoras and proposed there are two types of soul. the dry soul is the “wisest and the best” and the moistened soul is impaired due to drunkenness. Heraclitus also said the soul has a connection with motor functions and must have a logical faculty.

Socrates (470–399 BC) considered the soul is the psyche, an eternal, the essence of a person to behave as being. Reflection of thinking on the soul by Plato (428-427 BC) and Aristotle (384 -322 BC) presented in their book *Phaedo* and the *Republic* and in the *De Anima or On the Soul respectively*. Their broad conception of the soul was that the soul is not only responsible for mental or psychological functions like thought, perception and desire, moral qualities, and also functions vital organ of a living organism. According to Plato’s Trichomy theory of soul entering into body function exists even after death and can think and transcend (metempsychoysis) in subsequent bodies. He considered the soul has three parts. The *logos* are related to the reason that controls the other parts, located in the head, the *thymos* are located near the chest region and are related to anger, and, the *eros* are located in the stomach and are related to one’s desires. Where in a city or an individual, justice is declared when three parts fulfill its function as a whole, while temperance each part or interferes then justice does not attempt. In Aristotle’s dualism, the soul and body is the composite of human beings. Aristotle felt that man is born with a blank slate (*tabula rasa*) on which experiences and perceptions are written to the mind. Epicureans (341-270 BC) believed everything was composed of atoms. He disagreed with Plato and Aristotle that plants were ensouled. However, during the Hellenistic era in the 3rd century AD Stoics attribute the soul was responsible only for mental and psychological functions.

Avicennian’s (981–1037) doctrine of the soul in his “The Ten Intellects” attributes the nature of the soul that was influenced by the scholastics. Immortality of the soul is a consequence of its nature of law and not a purpose for it to fulfill. According to his theory, the human soul is the tenth and final intellect with a strong Neoplatonic superstructure.

Religious scholars and philosophers claim that the soul is an essence, a non-matter, a reality, concealed within the material body and administers the body under the influence of the soul. Hence the soul is a metaphysical reality and at the same time has direct communication with matter and the body of man and conducts it.

**Soul in Religion:** Moses and Jesus did not say anything about the soul. Christians accepted the notion of Plato’s trichotomy to the church through Augustin (354–430 BC) to Aquinas (1225-1274) when Christianity became the state religion in the 4th century AD. Christian tradition believed in the agony of body and spirit in the material universe and then transcend to God. Some have conviction in God’s revelation and belief Torah, Bible, and Quran. Their conviction is that the same book has been revealed by God one after another on the most obedient chosen people of God. However, later Torah and Bible were changed by Roman and Greek wisdom. As the Quran is the latest religion and was written by the time of prophet Mohammad, no part can deviate. Also Quran is the vast knowledge of soul, death, burzakh and hereafter. So, we can learn religious verdicts about soul, death, burzakh and hereafter from Quran in detail.
which are the Islamic laws, ethics, philosophy, and prescriptions for life.

In Hebrew nefesh or ruah refer to wind or breath. The Old Testament says God formed man from dust and breathed into his nostrils, and man became a living soul 15,16.

In Christian eschatology, after death, the souls will be judged by God according to their deeds and they will be rewarded to heaven or hell after resurrection. It is interesting that, in the 6th century, the bishops Council of Maçon had to vote to decide whether women had souls 17.

Hindus believe in traducianism. According to Hinduism “soul” is the eternal, unchanging, and infinite cycle of birth, death, and rebirth. The souls are continually reincarnated in different physical forms according to the law of karma, a cosmic law of moral debit and credit. They believe the soul exists before the moment of conception. In the 3rd century BC, Buddhism does not believe the soul is eternal and transmigrates from one life to the next. They believe that karmic flame is the consciousness, is the soul 18.

**Soul in Islam:** The Arabic words nafs (soul) and the ‘Ruh’ (spirit) which is the cause of life. The spirits are the first creations 19 the command of Allah 20 closest to Allah, a part of Allah. The soul is the self, the mind, our identity or consciousness. Personality or ego is the ever-changing different levels of consciousness. The soul is constituting with a moral and religious orientation. Deviated from this orientation soul becomes evil 7. Quran says

“When I have fashioned him (in due proportion) and breathed into him of My spirit, fall ye down in obeisance unto him.” 21 And also

“O Mohammad, they ask you about the spirit”. Say: “The spirit descends by the command of my Lord, but you have been given only a little knowledge” 22.

Our soul was created by God much before our long birth and committed there is no Lord other than Him 19. The below verse of the Quran reminds us about the commitment made between us and Allah before our birth. So that no one can say we did sin as our forefathers did. Why Allah you will punish us for their sin? This confirms that we had an existence and consciousness before our birth.

“Allah made the human soul from His breath, gave conciseness and free will, and gave preference above all the creation. After creating Adam, the first human, from clay, Allah provided spirit from him and commanded all angels to prostrate Adam.

“And We did certainly create man out of clay from an altered black mud. 27 And the jinn We created before from scorching fire. 28. And [mention, O Muhammad], when your Lord said to the angels, 29 "I will create a human being out of clay from an altered black
mud. And when I have proportioned him and breathed into him of My [created] soul, then fall down to him in prostration"26. And also "When I have fashioned him (in due proportion) and breathed into him of my spirit, fall ye down in obeisance unto him"21.

However, Shaykh As-Saduq in his book Creed said that the soul of Muhammad is the first soul created long before the creation of Adam (A) is in conformity with Prophet Mohammad (PBU).

The first thing which Allah created out of nothing were the blessed and pure souls; then Allah made them declare His oneness (Tawheed); and after that He brought into being other creatures19.

How other Souls were created: Allah created Hawwa (Eve) the mate of Adam from the same nature and soul. From them, generations of human beings are being lived on the earth.

"It is He - Allah - Who created you from a single being, and out of it He made its mate, that he may find comfort in her "27. And

"He it is Who created you from a single being, and He it is Who made from it its mate. He it is Who created for you eight heads of cattle in pairs. He creates you in your mother's wombs, giving you one form after another in thre fold depths of darkness. That, then, is Allah, your Lord. His is the kingdom. There is no god but He. So, whence are you being turned astray"28. And

"Oh humankind! We created you from a single pair of a male and a female, and made you into nations and tribes, so that you may know each other (not that ye may despise each other). Verily the most honored among you in the sight of Allah is the who is the most righteous of you. And Allah has full knowledge and is well acquainted (with all things)"29.

Are these verses indicating the cloning of human embryos and stem cells? Cloning is derived from a single individual as a result of non-sexual reproduction an organism with an identical genetic make-up30. Every tissue can be formed from cloning to repair and replace the pathological tissue and organ of humans. Thus the scientists hope to treat cancer, diabetes, nervous tissue disease, heart disease, immunity disease, and genetic disease as well30. Is this verse being direct concomitant with human cloning in Islam? Not only this verse, many verses of the Quran indicate the cloning, human embryos and stem cells development process. Again and again in many verses of the Quran, Allah said “He provide all the information’s. There are many things to research for knowledgeable persons”.

However, human cloning is not permitted in Islam probably there are many ethical, legal, and medical concern. Little is known yet about the potential side effects of cloning. How to determine the age of a clone person? Does it count from their birth or the date of birth of the donor? There is a possibility of jeopardized biological diversity of the species, human rights, freedom, dignity. There is a possibility of trade of the cloned body and organs, abortion, killing trade of slave rate may increase30,31.

However, Quran also depicts some unusual birth by the grace of Allah’s will. Allah gave Zakaria the son of Yaahia at his old age when his wife was no longer capable of giving birth to a baby 32. Again, the birth of Jesus without touch of any man. The birth of Jesus was like the creation of Adam develop from nothing at Allah’s will.

“Surely the likeness of Isa (Jesus) in the Providence of Allah is as the likeness of Adam. He (Allah) created him of dust, thereafter He said to him, “Be!” so he is. This is the truth from your Lord; be not, then, among those who doubt”32

Quranic verse says other souls are down to the earth through Engels by the order of Allah except for Adam.

“The angels and the Spirit descent unto him” 32.
Harmony between souls: ‘Love at the first sight’ or hate at first sight are not just present in cinema. Souls are met and have experienced these inexplicable feelings at one time or the other. Imam Ja’far As Sadiq, the sixth descendant of the Prophet Mohammad said that Allah established brotherhood between the Souls 2000 years before creating the bodies. For this reason, when Imam Mahdi (A) appears, man will alliance with him as a brother of spirits but not the brother by birth.

“And the Prophet has said, the souls are like a collection of armed forces, whichever souls knew each other (in that world) are attracted towards each other (in this world) and whichever remained apart and aloof there are repulsed from each other (in this life)” 19.

Phenomenological, our bodies emit electrical currents, that we are attracted to and make us in harmony with ours. If the waves are not in harmony, we instantly dislike that person. Imam Ja’far as-Sadiq (A) explained that the primary cause of attraction or repulsion is for the spiritual world.

The soul during death: According to the hadith, when a person dies, the soul travels from feet to the throat and the eyes roll up as the soul travels and leaves from the body. ‘When the soul is taken, the eyes follow it” 34.

The soul after death: After a person dies, the soul is taken to the heavens by two angels and its fate depends on its state of righteousness. According to a hadith of Abu Hurayrah who said:

“When the soul of the believer is taken, it is met by two angels who take it up…” (The narrator said: then he mentioned its good fragrance and scent of musk). The people of heaven say, ‘A good soul that has come from earth, may Allah bless you and the body in which you used to dwell. Then they take it up to its Lord, may He be glorified and exalted, then He says, ‘Roam with it until the end of the world.’ When the unbeliever’s soul comes out… (the narrator mentioned its putrid smell and curses). The people of heaven say, ‘An evil soul that has come from earth,’ then it is said, ‘Roam with it until the end of the world’ 35. “Messenger of Allah (PUH) put a piece of cloth over his nose of disbeliever’s soul, like this,” said Abu Hurayrah.

Soul in Medicine: Neurosurgeons attempted restoration of the internal structure of the brain to normalcy by lobotomy but did not find soul. According to them, the brain is composed of a hundred billion neurons and various complex neural networks which attribute its function to chemical and electrical reactions staggering human thought and experience. So, the mind is the neural structure of the brain. However, the mind cannot be localized to particular areas within the brain, though the entire cerebral cortex and deep grey matter are important components of the mind. But conceptually, the amount of grey matter in the frontal lobes for intelligence and the parietal lobules for spatial reasoning and intuitions is the mind.

Psychologists suggested adrenaline, serotonin, dopamine, endorphins, and encephalins, enable and modify the many functions of the brain and mind and exert personality. Cardiac surgeon Dr. Max Baff, Clark University, Worcester, USA studied the soul using x-ray cinematography Photographs at the moment of death and immediately after. They could not see the soul leaving the body when the heart beat stops.

Where is the soul located in the human body? Science understands souls are purely corporeal and the qualities of life are associated with emerge through neurotransmitters such as serotonin, dopamine, epinephrine, and norepinephrine from the brain. In the 15 to 18 centuries philosophers tried to the location of the soul in the body. Descartes (1596–1650) proposed that the soul is localized in the pineal gland. Lancisi (1654–1720) felt that the soul could flow in the fibers of the medial striae of the
brain to corpus callosum to anterior columns of the fornix to the posterior part of the corpus callosum to thalamus to frontal cortex for consciousness and emotion, make a connection from here to the peripheral organs of the body 40. Total resection of pineal gland carcinoma is the most appropriate treatment and a better survival rate in neurosurgery treatment 41. Moreover, cognitive and behavioral domains are normal after corpus callosotomy and hypothalamus section in epileptic patients 42,43. Albrecht von Haller (1708–1777) placed the soul in the medulla oblongata 44.

Jews and Christian religious scholars try to find out the location of the soul. Some said the soul could be resided physically in the blood 45. “For the life of the flesh is in the blood, and I have given it for you on the altar to make atonement for your souls, for it is the blood that makes atonement by the life” 46. But the blood can be drained off completely and died in the spleen to filter it off and replaced by new blood cells continuously developed from bone marrow 47. The soul cannot be died, drained off and replaced again and again. Some proposed that soul may live in the germinal layer of our reproductive organs (testes or ovaries). Actually, the soul is still present in humans in absence of the reproductive organs 47.

Islamic religious scholars, philosophers did not point out the seated of soul in the body. They understand soul is connected with the body but cannot know where it is. Shaykh As-Saduq said if a limb of a man is severed, we do not say that so much portion of his soul has been cut off. Thus, we say that life is everywhere in the body. At the same time do not say that it is here, or it is ‘there’ Likewise, we know that God is everywhere; but we cannot say, ‘He is here’, or ‘He is there’. We cannot point towards Him 19. Prophet (PUH) understands the soul is eternal and change an abode from heaven to body during birth and body to Burzakhl/heaven after death.

The Prophet has said: ‘You were not created for extinction, but for eternal existence and you will only be transferred from one abode to another’. Verily the souls are strangers in the earth and imprisoned in the bodies 19.

Our proposition regarding the soul: The soul is eternal, non-material and immortal and functions when seated in the body. Our proposition toward the Albrecht von Haller placed the soul in the medulla oblongata. As the medulla oblongata contains the upper center for the autonomic nervous system that animate the heart and lung. During the development of human, the heart starts to first pump to beat at about 24th day but recognized by 28th day after fertilization which is 40 days after last menstruation. We are convinced that the time body is ensoulment and start functioning. Moreover, the musculoskeletal system and nervous system start to develop at the end of 3rd week of intrauterine life. The sympathetic nervous system starts to develop at about the 4th and the parasystemic nervous system at about the 5th week. The shaping of a human being needs up to 3 months to function psychophysical as being 48. Soul or self may be the interaction of the heart-brain. Later, the heart functions under the control of an autonomic system that resides in the medulla oblongata of the brain. We are convinced that the soul may reside in the heart. The heart provides proper nutrition for the body to function. When the heart stops man dies. The soul should be free of any control. If we cut off the heart from the frog and kept it in a normal saline solution, it would beat for three days. Therefore, heart surgeons perform bypass surgery, and Pacemaker in Heart Surgery is done by stopping the real heart using the artificial heart-lung machine. Again, the heart can work with minor congenital development however, major congenital heart abnormalities life is fetal. Soul animation, breathing, and pulsation from the heart through the veins 49.

However, this view is consistent with Quran. Therefore, some schools of Islam that believe the heart is the seat for ensoulment permit abortion for 40 days, and some schools believe interaction of the heart-brain permits abortion for up to 3 months. Also, later schools believed the census is the life or soul, may accept brain death and euthanasia or turn off the life support machine when the life is in a vegetated state, no sign of revert.
However, Allah at first makes the human image from clay and then ensouls the soul from him. Therefore, the human soul is the divine and comes from another world. Islam totally denies the Darwinian theory of the evolution of human development from a monkey.

12. We created man out of the extract of clay, 13. then We made him into a drop of life-germ, then We placed it in a safe depository, 14. then We made this drop into a clot, then We made the clot into a lump, then We made the lump into bones, then We clothed the bones with flesh, and then We caused it to grow into another creation.

15. Thus Most Blessed is Allah, the Best of all those that create 

Weight of the soul: In 1907, Dr. Duncan MacDougall found the soul and it weighed between 0.5 to 1.5 ounces. He experimented with six dying patients of tuberculosis and weighed the soul by weighing a human being during death. The beam ended slightly at the upper limit of the bar of the balance before death. At the end of three hours and forty minutes, he expired and suddenly coincident with death the beam end dropped to the lower limit of the bar and remained there with no rebound. He concluded weight of the soul was 1.5 ounces, but others disagreed. After death there is sweating, urination or stool passes out from the dead body due to the relaxation of muscles and may be the reduction of weight.

Soul in Quantum physics: According to quantum physics energy comes from vibrating atoms. Two subatomic particles, can be in communication with each other even they are situated at the ends of the universe without signal is called a non-local causal relationship. For example, consciousness or dream etc. In consciousness we can move from New York to Dhaka and so on in a second. So quantum mechanics agree to the existence of soul or consciousness in the neural processes in the brain. According to quantum physics, if energy is dissociated there is nothing remain. But between the two subatomic particles even a nanometer of empty space, there is a pure void of cold blackness, the virtual energy. This energy is the soul. If we understand from something to nothing, from solid to intangible, from energy to potential, from action to possibility, we can grasp our soul.

Conclusion: From the above discussion, it has been seen that the soul was discussed more actively by philosophers before the birth of Christ. Only religion discussed the soul elaborately. Though discussion of the soul is more extensive in Islam than in other religions. Medicine did not answer what is soul and where does soul is situated in our body. Western bioethics omits discussion on the soul, though they discussed “good death”. We cannot understand death well enough if the soul is not addressed. Quantum physics is trying to address the soul from a different perspective that may be the triumph of 21st century. May be we can find the solution one day. This article may highlight the soul for further research what soul is? Where is it situated? and what is the implication of the soul in our life existence?

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