



QUR'AN ON EMBRYOLOGY: A STUDY OF QUR'ANIC AND MODERN CONCEPT OF HUMAN DEVELOPMENT

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Abstract: The present era is the most astonishing from a developmental point of view. People across the globe are impressed by the latest developments and more particularly by genetic engineering. From an academic point of view, debates are organized on religion and science. Intellectuals are trying to prove their stands in their respective fields. Religious scholars put their efforts to prove their stand as the most applicable in the present era. A good number of modern scholars like Keith Moore, Maurice Bucaille, etc. also supported some religious facts mentioned in the religious books particularly in the Quran related to embryology. Among the most debate table issues is the concept of human development in the Quran and gave rise to a comparative study between religion and science again. In this paper, an analytical approach is applied to find the compatibility of Qur'anic embryology and modern embryology, in order to pinnacle and galvanize Qur'anic modern attitude.

Keywords human evolution, idzam, male and female gametes, nutfah, *qararim makeen*

Abstrak: Era saat ini adalah era yang paling menakjubkan dari sudut pandang ilmu perkembangan. Masyarakat dunia terkesan dengan perkembangan terbaru, terkhususnya rekayasa genetika. Dari sudut pandang akademis, perdebatan terus terjadi antara ilmu agama dan sains. Para intelektual berusaha membuktikan pendiriannya pada bidangnya masing-masing. Para ulama melakukan upaya untuk membuktikan pendirian mereka sebagai yang paling dapat diterapkan di era sekarang. Sejumlah sarjana modern seperti Keith Moore, Maurice Bucaille, dll. Juga mendukung beberapa fakta religius yang disebutkan dalam buku-buku agama khususnya dalam Alquran yang berkaitan dengan embriologi. Di antara masalah yang paling banyak diperdebatkan adalah konsep perkembangan manusia dalam Alquran dan memunculkan kembali studi komparatif antara agama dan sains. Dalam tulisan ini, pendekatan analitik diterapkan untuk menemukan kesesuaian antara embriologi Al-Qur'an dan embriologi modern, guna menyokong dan memupuk sikap modern terhadap Al-Qur'an.

Kata Kunci: evolusi manusia, idzam, gamet laki-laki dan perempuan, nutfah, *qararim makeen*

Introduction

If one wish to comb through the works of the first few centuries of the history of Muslims to find a book, entitled as Islam and Cosmology, Islam and environment, Islam and Science, Islam and the West etc. one would likely be searching in vain. For example, the bibliographical work of al-Nadim does not carry any such title. However at present a good number of such titles are available (Anonym, 2000), and this clearly indicates a noteworthy transferal in the understanding of Islam under broader dimensions. However, the most misleading of the modern materialistic concepts currently in vogue is theory of Evolution. Though it got acceptance from the beginning, but never before had it found so widespread recognition. It has reasonably attained its highest point and holds an unquestioned sway over the educated minds. Evolution implies progressive creation of things without any divine role.

Among those of the contemporary ideologies and concepts which pose a challenge to the religious faiths, the theory of evolution is a notable one. It is more a hypothesis than a fact and several attempts to prove it as a scientific fact have turned futile. Being one of the modern age's most contentious issues, it has attracted good deal of intellectual efforts and discussion. The issue has inspired a lot of experimentation in farms, orchards and laboratories. During such experiments, chimpanzees have been tamed and trained to produce out of them human beings. The quest for biological samples has led the scientists to remote corners of the earth, to the ocean beds, and excavation of fossil remains. Their findings have been carried in thousands of books and volumes all over the world.

A. Evolution theory and the holy Qur'an

The evolution theory and the holy Qur'an are in direct conflict with each other and no compatibility is possible anywhere. Absence of a comprehensive discussion on the theory of evolution from Islamic viewpoint has naturally led the Muslims to develop faith in it. This paper attempts at removing the misgivings found in the Muslim mind on this notch. It consists of mostly such of the arguments as are advanced in the light of the holy Qur'an and the Prophet's Sunnah. These arguments that clearly establish Adam's fatherhood of humanity have however been intermingled with scientific observations. Although written from an Islamic perspective, the paper ought to provide the general readers with sufficient scientific and logical stuff to realize the slip-ups committed by the evolutionists in the name of science and the underlying heinous motives.

The Quran is obviously revealed Book from Allah upon Prophet Mohammad (pbuh) through Angel Gabriel. However, not a scientific book but it mentioned scientific facts only recently discovered by scientists through the sophisticated technology. All these things escort that Quran is really a divine word send for guidance to mankind on every sphere of life to facilitate the mankind to reach the depth of reality. In Quran, large number of verses are up to date with the scientific developments, but scientists are still far-away from reaching the miraculous nature of Quran (Naik, 1999). The message Holy Quran imparts from its verses are signs in loud clear.

سَرُّهُمْ ءَايَاتِنَا فِي الْأَفَاقِ وَفِي أَنفُسِهِمْ حَتَّىٰ يَتَبَيَّنَ لَهُمْ أَنَّهُ الْحَقُّ ۗ

Meaning:

"We will show them Our signs in the horizons and within themselves until it becomes clear to them that it is the truth" (QS. Fussilat: 53).

In the creation of whole natural scenario the development of human being, occupies a very unique position. The story of man's tryst with nature is as old as mankind itself. It is beyond the reason to think 1500 years back that the sophisticated equipments which now-a-day show embryological development and its different stages which gave boost to current scientific approach are mentioned in the Holy Quran, which very uniquely touches the realities of human embryonic development.

Here before going to touch and mention the human development in the Holy Quran it is better to explain the term embryology first "Embryology is a field which deals with the study of the formation and development of an embryo and foetus (Anonym, 1993). The Holy Quran presents various verses describing the creation of man from the basic ideas till child birth through various developmental stages of fetus in the womb of mother. Allah claims to have created man in best of his moulds irrespective of facilities in view of his low origin from a despised drop. There are near about hundred verses in Holy Quran, which had explained the embryonic development deals very accurately with the science of embryology (Moore, 1992).

Trying to reach the depth of embryonic development it is necessary to know the historical background of this field other than Holy Quran. As per the modern scientific theory, embryo is developed from a single cell was established in 1839. In this regard, Schleiden and Schwann had given cell theory, which classifies embryo being developed from the zygote. However, other theories which are of no importance are presented in last phase of 20th century. In this field in 1956 that Tyo and Lejeune proved that there are 46 chromosomes not 48, which plays great role in fertilization. During pre-Islamic period many theories also exist like that of Greeks and Hindu's. As per Greek theories are concerned they are of the view human formation is from menstrual blood. As Aristotle and Hippocrates theory concerning to embryonic development, they argued that human development constitutes all the natural bodies, water and fire. Both of these in turn consist of heat, dryness and moisture in different proportions likewise other Greek philosophers forwarded their theories in the same manner with little difference. The Hindu antiquity regarding embryology is, it is a structure mixture of semen and blood, and on the other hand, it was thought that a miniature creature is preformed first. It was only in late 18th century, that Spallanzani suggested that both sperm and ovum are necessary and sperm is the main fertilizing agent. The modern scientists prove their embryonic theory after the latest apparatus such as electronic microscope and the development branches like anatomy, physiology.

Now we touch the main theme of this paper what Holy Quran says about the development of human being through different stages. Holy Quran suggests that both male and female plays an important role in the reproduction, but also describes historically that man is first created from the clay.

وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سُلَالَةٍ مِنْ طِينٍ ۚ ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ ۚ ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ثُمَّ أَنْشَأْنَاهُ خَلْقًا آخَرَ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ ۝

Meaning:

"Man, we did create from a quintessence (of clay). Then we placed him as (a drop) of sperm in a place of rest firmly fixed, and then we made the sperm into a clot of congealed blood. Then of that clot we made a (fetus) lump, then we made out of that lump bones and clothed the bones with flesh" (QS. Al-Mu'minun: 12-14).

In Holy Quran some verses are very brief regarding the development of human being but these verses could be studied in the light of descriptive ones. The accuracy through which Holy Quran explains the various details of embryo was much ahead of time. In surah Anbiya Allah says,

وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ ۚ

Meaning:

"And we created from water every living thing" (QS. Al-Anbiya: 30)

Particularly regarding the human development Allah says,

وَهُوَ الَّذِي خَلَقَ مِنَ الْمَاءِ بَشَرًا فَجَعَلَهُ نَسَبًا وَصِهْرًا ۗ وَكَانَ رَبُّكَ قَدِيرًا ۝

Meaning:

"It is He, who has created man from water, then has he established relationship of lineage and marriage; for thy Lord has power over all things" (QS. Al-Furqan: 54).

An appropriate description of the creation of man is highlighted in the Holy Quran. This information is in accordance with the latest scientific achievements. According to "Cell Theory" a cell is the basic unit of life and cytoplasm is the most important part of the cell. It is made of 80% of water. Modern scientific theories are of the view that most organisms consists of 50-90% of water (Holy Quran further made clear this fact by describing the various characteristics of this liquid (water). It is also applied for the Arabic words Mim Mayhem and Mae-e-dafiq. These two words directly refer to male germ cell (spermatozoa) and eggs (the female).

ثُمَّ جَعَلَ نَسْلَهُ مِنْ مَاءٍ مَّهِينٍ ۚ

Meaning:

"And made his progeny from quintessence of the nature of a fluid despised" (QS. As-Sajdah: 8).

In another surah it is as,

أَلَمْ نَخْلُقْكُمْ مِنْ مَاءٍ مَّهِينٍ ۚ فَجَعَلْنَاهُ فِي قَرَارٍ مَكِينٍ ۚ

Meaning:

"Have we not created you from a fluid despicable? Which we placed in a place of rest firmly fixed" (QS. Al-Mursalat: 20-21)

The etymological meaning of the word Mayhem means despised despicable, contemptible vile its adjective meaning is emitted through outlet of the urinary track used for the excretion of Urine (Alam, 1997).

In Holy Quran it is also explained as Sulala, this is translated as quintessence of best part of a whole. Here we say that semen is poured out through the reproductive part of the body. According to modern scientific theory 200-300 million spermatozoa, induce into female genital tract only 300-500 reach of the

site of fertilization and only one among these spermatozoa get fertilized, this exactly matches with the Quranic description of the best part of a whole. In surah Tariq it is explained as a liquid as:

فَلْيَنْظُرِ الْإِنْسَانُ مِمَّ خُلِقَ ۖ خُلِقَ مِنْ مَّاءٍ رَاقٍ

Meaning:

"Now let man but think from what he is created. He is created from drop emitted." (QS. At-Tariq: 5-6)

The Arabic term "Dafiq" means poured forth. This meaning is very close to meaning of the word sperm, which is poured forth/emitted by male.¹⁰ In Holy Quran the development of an embryo is explained very accurately. In surah al-Hajj it is said:

يَأْتِيهَا النَّاسُ إِنْ كُنْتُمْ فِي رَيْبٍ مِّنَ الْبَعْثِ فَإِنَّا خَلَقْنَاهُ مِن نُّرَابٍ ثُمَّ مِّن نُّطْفَةٍ ثُمَّ مِّن عَلَقَةٍ ثُمَّ مِّن مُّضْغَةٍ مُّخَلَّقَةٍ
وَعَيْرٍ مُّخَلَّقَةٍ لِّنُبَيِّنَ لَكُمْ

Meaning:

"O mankind! If you have a doubt the resurrection (consider) that we created you out of dust, then out of sperm, than out of a leach-like structure, than out of a morsel of flesh partly formed and partly unformed in order that we may manifest to you" (QS. Al-Hajj: 5).

In surah al Mumineen it is very explicitly said that:

وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِن سُلَالَةٍ مِّن طِينٍ ۚ ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَّكِينٍ ۚ ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ
مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ثُمَّ أَنشَأْنَاهُ خَلْقًا آخَرَ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ ۙ

Meaning:

"Man we did create from a quintessence (of clay) then we placed him as (a drop of) sperm in a place of rest firmly fixed, then we made the sperm into a clot of congealed blood, then of that clot we made a (fetus) Lump; then we made out of that Lump, bone and clothed the bones with flesh, then we develop out of it another creature so blessed be Allah the best of create!" (QS. al Mumineen: 12-14).

Keeping the above verse in view, Allah states that man is created from a small quantity of liquid which is placed in a place of rest, firmly fixed (well established or lodged) for which the Arabic word Qarrim Makeem in used. Observing Quranic verses three different stages are mentioned in it.

1. Nutfah

The word nutfah is used twelve times in Holy Quran; 16:14; 18:37; 23:12, 13; 35:11; 36:77; 40:67; 53:46; 75:37; 76:2, 80:19. Under varying meanings and contexts, sperm which is (sperm) obviously alkaline in reaction and nature and mix with the secretion of the prostate gland nourishes the sperm. This Arabic word Nutfah in generally translated as spermatid fluid. A drop of this spermatid fluid contains millions of sperms, which are forcefully emitted at a time of ejaculation. In female, each ovary contains several hundred immature eggs, out of which only about 400 mature during lifetime of a women. During the puberty the pituitary gland secretes a hormone follicle along with liquid follicle and due to ejaculation property sperm liberates its contents. The verse Maa in Dafiq means fluid that release the ovum and its fluid. During ovulation as it has been interpreted recently. The liberated eggs make their entry into fallopian tube and the sperms are deposited into vagina. The migrated sperm make their entry through uterus into fallopian tube and mix with ovum, only one sperm get fertilized after mixing with ovum and form Zygote. This Zygote (Nutfah) came into division into number of cells which form a cluster called Morula and spread to form blastocyst. This blastocyst after ovulation after some days attach itself to the front wall of the Uterus (Alam, 1997). Ibn Hajr Asqalani a great Muslim scholar pointed out in his work Fatuh ul Bari sharah shih Bukhari that, after fertilization Nutfah (Zygote) takes six days to get attached with the uterine wall.

After attaching to uterine wall, rapid changes occurs which leads to the differentiation of the next stage (Authors team, 2000).)Keeping the above description in view that word Nutfah means a drop

which is a mixture of male and female gametes. However, it is a comprehensive term which means male and female gametes and the natural fluid in the embryo. This is explained exactly in Holy Quran as In surah Najim:

مِن نُّطْفَةٍ إِذَا تُمْنَى ٤٦

Meaning:

"From a seed when lodged (in its place)" (QS. An-Najm: 46).

In Surah Qiyamah:

أَلَمْ يَكُ نُطْفَةً مِّن مَّنِي يُمْنَى ٣٧

Meaning:

"Was he not a drop or part of germinal fluid emitted (QS. Al-Qiyamah: 37).

The meaning of the word "maen" here relates to male and female germinal fluid. In this regard, the prophet Mohammad (pbuh) is of the view that offspring is created from part of the germinal fluid as, "Not from all the fluid is the offspring created" (Sahih Muslim; Kitab al Nikah; Bab al Azl).

The scientific interpretation of the word Nutfah with reference to embryology in Holy Quran given by Maurice Bucuille in his famous work pointed out that the word Nutfah means to dribble or poured out (Buacille, 1977). His concept of dribbling resembles with the Quran as it is mentioned in Surah Qiyamah: 37 with meaning *"was (man) not created from a small quantity of sperm which has been poured out"*

Another verse specifies that the small quantity in question be put in a firmly established lodging, which obviously means the genital organs.

ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَّكِينٍ ١٣

Meaning:

"Then we placed (man) as a small quantity of sperm in a safe lodging firmly established place" (QS. Al-Mu'minun: 13).

Dr. Zindani Associate professor in King Fahd University Saudi Arabia mention the word Nutfah exactly means the male and female gametes. It not only includes Zygote but also morula and blast cyst until implemented in the uterus. Consequently, the word Nutfah also called "Ismaj" is explained once again in the Holy Quran.

إِنَّا خَلَقْنَا الْإِنْسَانَ مِن نُّطْفَةٍ أَمْشَاجٍ نَّبْتَلِيهِ فَجَعَلْنَاهُ سَمِيعًا بَصِيرًا ٢

Meaning:

"Verily we created man from a drop of mingled sperm." (QS. Al Insaan: 2).

Some commentators are of view that mingled liquid refers to the male and female gametes because after their combination they remain Nutfah but others held the view that mingled liquid refers to spermatic fluid formed by a various secretions ejected from the different glands: testicle, seminal vesicle, prostate gland, and glands attached to urinary tract.

In Holy Quran the word Nutfah means both male and female gametes and after combination they form zygote. So Nutfah (Zygote) is a comprehensive term which rests on the Qurarim - Makein refers to mother's womb and remain suspended with the uterine wall or to uterus (Buacille, 1977). After completing the combination the zygote reach the second stage of reproduction. This suspended thing has been called Alaqah (Auhtors team, 2000).

2. Alaqah

Literary this word in Arabic has three different meaning as it accomplish three different positions. This word Alaqah came five times in Holy Quranic [23:14, 40:67, 75:28, 96:2]. The three different shapes are known as:

- 1) Leech like
- 2) Anything hanging or suspended from a surface.

3) Thin clotted blood with a deep red colour but still moist (Ibrahim, 1977).

The three above shapes of embryo are perfectly in accordance with the modern scientific approach. As mentioned earlier, that Nutfah has same meaning as that of blastocyst. The 11th and 12th day of developed blastocyst is completely embedded in the endometrial Struma. During the 13th day the extra-embryonic mesoderm traverses to the chorionic cavity (extra embryonic coelom) to form connecting stalk. In the 19th and 20th day embryo attaches to trophoblastic shell by a narrow connecting stalk. During the third week embryo is found suspended in the chronic cavity by means of the connecting stalk and is surrounded by the amniotic cavity and yolk sac (Longman, 1981). The above description shows that Alaqah is the suspended form of embryo which resembles leech-like appearance, when seen on 27th day of its development. From this stage the embryo depends on the maternal blood for its nourishment (Moore, 1986) and acts very much like a leech.

In Holy Quran it is defined as:

ثُمَّ خَلَقْنَا اللَّطْفَةَ عَلَقَةً

Meaning:

"Then we placed the drop into a leech-like structure" (QS. Al-Mu'minun: 14).

Professor Zindani is of the view that, Alaqah refers to leech (An insect which suck blood) as per its external appearance. After 24 day when embryo suspends with endometrial of the uterus, the blood clots within the closed vessel. During this period the embryo is just visible to the naked eye because of its small size than a Kernel of wheat. After the Alaqah stage the embryo looks like the chewed lump. In Holy Quran it is mentioned as:

فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً

Meaning:

"Then of that Leech-like structure, we made a chewed lump" (QS. Al-Mu'minun:14).

After Alaqah stage in which blood dryness starts and it adopte structure of Hard Substance. In this way next stage of embryonic development starts which is known as Mudghah.

3. Mudghah

This word occurs three times in Holy Quran. In Arabic terminology the meaning of the word is chewed substance or a chewed lump (Anonym, 2000). This Arabic word means chewed substance like that of gum if put into mouth and chew it and compare it with an embryo at Mudghah stage we can says that the somites on the chewed substance at this stage.

After completing 4th week the human embryo shows somites which results like teeth marks. These somites represent the primordia of the Vertebrae. After 28th day the embryo shows bead-like somites. These somites and pharyngeal arches give the embryo look masticated lump with the indentation of the teeth quite apparent. Then bones develop from this chewed lump. The bone structure developed inside this mass is called mesenchyme (Longman, 1981).

فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ثُمَّ أَذْشَانَهُ خَلْقًا آخَرَ

Meaning:

".....Then of that clot We made A (Foetus), then out of the chewed lump, We made bones and clothed the bones with flesh." (Al-Mu'minun: 14).

In Holy Quran Mudghah is explained in two ways, in one the components are differentiated and in the other they fall short of differentiation.

ثُمَّ مِنْ مُضْغَةٍ مُخَلَّقَةٍ وَعَيْرٍ مُخَلَّقَةٍ لِنَبِّينٍ لَكُمْ

Meaning:

"Then out of Morsel of flesh partly formed and partly unformed (QS. Al-Hajj: 5).

Al-Razi interpreted this part of verse in this manner."By Mukhallaqa meant Mudghah in which the formative process proceeds normally to get differentiated while the Gair-Mukhallaqa represents a form

of imperfect creation?. According to al-Razi that Allah has classified *Mudghab*, into the perfect human beings, without any defect, others remain incomplete (imperfect) (Razi, 1980).

Here the word *Asmaj* means mixture of male and female germinal fluids or cells. In this regard all the Islamic scholars unanimous about the meaning of the word while interpreting this verse as:

إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْشَاجٍ

Meaning:

“*Verily we created man from mixture of germinal fluid*” (QS. ad-Dhar: 2).

However, medical scientists try to manipulate this reality that, sperm is not proliferated near kidney, but logically saying that urinary and genital system are initially interwoven. Both develop along the posterior wall of the abdominal cavity from a common mesoderm ridge. The gonads adopt the morphological characters of male and female after 7th week. The testicles and ovaries begin their development near the kidney exactly between the spinal cord and the 11th and 12th ribs. Later female gonads stop descend while the male gonads continue there debauchery and reach the scrotum through the inguinal canal. They got nerve supply Pudenda/nerve and blood supply from the aorta, which is area between the back bone and the ribs. Keeping in view, the above description, actually the genesis of sperm production is near back bone and deposited in testicles and later on released from the testicles and the Oocyte is released from the region between backbone and ribs near the kidney (Longman, 1981). These are later on lodged in a place called in holy Quran as place of security which is mentioned as **“Qurarim-Makein”**. In Holy Quran full insight was provided for the lodging the child in the womb of mother.

يَخْلُقُكُمْ فِي بُطُونِ أُمَّهَاتِكُمْ خَلْقًا مِّنْ بَعْدِ خَلْقٍ فِي ظُلُمَاتٍ ثَلَاثٍ

Meaning:

“*Allah creates you in the womb of your mother creation after creation within the three veils of darkness*” (QS. Az-Zumar: 6).

This stage is also called blastomeres. After fertilization, the egg undergoes cell division, or cleavage. Thus, one cell divides into two; the daughter cells, called blastomeres, and then cleave into four; these cleave into eight, and so on. When the embryo consists of a hundred or more cells it may form a solid mass, called a morula from its resemblance to a mulberry. However, according to Professor Keith Moore, the three veils of darkness in the Quran are as follow: anterior abdominal wall of the mother, uterine wall (womb), and amino-chronic membrane sacs.

The third amino-chronic membrane sac is made of three membranes, the amnion, the chorion, yolk Sac and distinct germ cells. All these membranes feed fetus in their own way. However, these three veils of darkness mentioned by Professor Keith Moore are against the real meaning of the teaching of Quran. According to the three veils of darkness mentioned in the Holy Quran are Ectoderm, Mesoderm and endoderm. From these layers every part of the fetus starts developing and leads to the formation of offspring. This point of view is very accurately described in the Hadith of Prophet Mohammad (pbuh) that the stages of creation of the specific differentiated organs start formation when forty to forty five nights pass over the drop. Allah sends an angle to it that shapes and makes its ears skin flesh and bones. Then says “*O! Lord is it male or female and your Lord decides and the Angel records it* (Sahih Muslim: Kitab al Qadar).

Later on when the bones were formed and these bones were covered by the flesh. The distinguishing shape and form of 12 week fetus were scientifically explained by Azzindani (1983) “A twelve weeks gestation, centers of ossification is present most bones, the limbs are differentiated and nails can be detected on fingers and toes. Lanugo hair is present on the skin, which is fully differentiated into epidermis and hypodermis. The testes have begun their development and the internal genitals are developing; a male fetus can be distinguished from a female on the basis of the external genital or organs. Voluntary and smooth musculature are established fetuses at this stage of development reveal spontaneous movements and reflex muscular contractions can be elicited by an external stimulus” (Azzindani & Moore, 1983).

The various stages of development and creation which are explained in Holy Quran, as Allah says He created man from dust, clay, water and despised liquid` are purely scientific. In this regard Professor Keith Moore a world renowned embryologist in his work." Developing Human says that "the modern classification of developmental stages which are adapted throughout the world is not easily comprehensible, the distinct and easily identifiable forms or shapes, which the embryo poses through. These are based on different phases of development and provide elegant, scientific descriptions that are comprehensible and practical. The facts given in Holy Quran related to modern scientific approaches are appreciated by the experts of the field of embryology. Hamm and Leeuwenhoek were the two scientists who first time used highly magnifying microscope in 1677, discovered and observed sperm cells (Spermatozoa) (Alam, 1997).

Moreover professor Emeritus Keith L. Moore one of the world's renowned scholar in the field of anatomy and embryology and the author of the book. Developing Human translated into eight languages and act as scientific reference book chosen by special committee in the United States as an authentic book ever written in the field of embryology. In 1981 during the 7th Medical conference in Dammam Saudi Arabia pointed out that, the statements in the Holy Quran about Human development put forth authentic arguments in order to prove that Quranic embryological concept are proved by the modern science and many scientists accepted that if scholars work on the verses of Holy Quran it will prove highly beneficial for the humanity.

Islamization of knowledge is a movement of relating the idea of Islam to other social, political scientific and intellectual ideas. In this sense, the discourse is part of a widely advocated call for the Islamisation of various aspects of knowledge. By exploring the discussion on Quran on modern embryology, an attempt was made to evaluate the underlying facts in this field. Undoubtedly, there is a diversity of approaches to, writings about Islam and Science. Nevertheless, no personal manifestation of Prophet Muhammad was involved in this case, because knowledge was limited and people were not having such clear cut concepts related to embryology and other sciences. This demonstrate that Prophet Mohammad is messenger of Allah (Ibrahim, 1997). The purpose of revealing Holy Quran is to bring mankind near to Allah and get his favor, at the meantime, it also fulfills other necessities of life required to help man-kind to build up spiritually and Civilizations based on truth and facts.

References

- Alam, Shah Manzoor. 1997. *Scientific Significance in Selected Quranic verses, Imam Mohammad ibn Saud*. Islamic University.
- Authors Team. 1993. *The New Encyclopedia Britannica*. USA: Library of Congress Catalog.
- Authors Team. 2000. *Encyclopedia of the Holy Quran*. Delhi: Global vision publishing House.
- Azzindani and Moore K.L. 1983. *The developing Human (clinically oriented) with Islamic edition with Quran Hadith*. Jeddah: Dar ul Qibla King Abdul Aziz University.
- Buacille, Maurice. 1977. *The Bible the Quran and Science*. Dar ul Marif Egypt.
- Ibrahim, I.A. 1997. *A Brief Illustrated Guide to Understanding Islam*. Darussalam Houston.
- Lane, Edward William. 1956. *Arabic-English Lexicon*. New York: Fredrick Unger publishing house. Co.
- Longman, Jan. 1981. *Medical Embryology*, 4th ed. USA: The William and Wilkins Company Baltimore.
- Mahdi, E., Abolfazl, F., & Hamid, S. 2012. Developmental biology in Holy Quran. *Journal of Physiology and Pathophysiology*, 3(1), 1-7.
- Moore K.L. 1992. *Human Development as Described in the Quran and Sunnah*. Makkah: Commission on Scientific Signs of the Quran and Sunnah.
- Moore, K.L. 1986. "A Scientific Interpretation of Reference to Embryology in The Holy Qu'ran." *Journal of Islamic Medical Association of US and Canada*: 15-18.
- Naik, Zakir. 1999. *The Quran and Modern Science Compatible or Incompatible*. Islamic Research foundation.
- Razi, Imam. 1890. *Tafsir al Kabir, al matba al Amira al Ashrafia*.
- Saadat, S. 2009. Human embryology and the holy Quran: an overview. *International journal of health sciences*, 3(1), 103.