Islamic Approach to Human Embryology in Modern Scientific Perspectives

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Abstract: Human being's quest to be aware of their origin (beginning) has led him in searching their genealogy roots as well as the perfect source for them has been religious scriptures (holy books). The enormous miracle is the righteous Qur'ān. In the miraculous Qur'ān, is an appropriate narrative statement of origin, reproduction and step by step developmental phases / stages of intra-uterine life. The sacred in Qur'ān had revealed this comprehension knowledge in 7th century. Moreover, hadiths (sayings and deeds) of the Prophet Muhammad (Upon whom be peace and greetings) had interpreted approximately everything concerning natal as well as postnatal events. These discoveries when presented to the professionals and experts of Anatomy and Embryology, surprised them. They believed that the knowledge given to the holy Prophet Muhammad (Upon whom be peace and greetings) was undeniably divine. This paper compared a number of passages from the Magnificent Qur'an and the sayings of prophet Muhammad (Upon whom be peace and greetings) (hadīth, pl aḥādīth) with contemporary theories in genetics, for instance genetic counseling, recessive inheritance, sex chromosomes, cytoplasmic inheritance, genetics-environment interactions, genetic variation and gender determination. This study will contribute a linguistic (grammatical) breakdown of the appropriate verses and ahādīth, and show a relationship between these linguistic objects to prove traditionally truths in the field of human embryology. In chapter 23, verses 12 to 14, the Qur'an provides eight meaningful points describing the process of the developing human embryo.

Keyword: Islam, Quran, Embryology, Scientific

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At first glance, the English translation of the Our'an's embryonic description seems uninvolved and simplistic. However, as this study will show through linguistic analysis of the Arabic Qur'an, each word conveys a depth of meaning that, upon closer look, correlates staggeringly to established reality.

To make certain of comprehensive understanding of this study, an overview of quranic exegesis ($tafs\bar{\imath}r$) will be provided to appreciate how the Our'an is made accessible and intelligible to the reader. This study will also address various contentions which attempt to challenge the credibility of the quranic discourse and its concurrence with modern embryology.

Introduction

The Arabic word Qur'an means "reading" and refer to as "the text which is read". The GlariousQur'an also calls itself "al-kitab" which linguistically designates a written book.

The Holly Qur'an is the supreme animate authority in Islam as it is the essential and fundamental source of the Islamic guidance, creed, laws and ethics. Muslims believe in that the Qur'an is a Divine book revealed by Allah (the Creator) and not the word of the Prophet Muhammad (May peace and blessings be upon him).

The Holly Qur'an, similar to any other legislative and spiritual book, requires exegesis. Our'ānic exegesis, known as "tafsīr" in Arabic, is essentially the knowledge through which one increases an understanding of the Qur'ān and a comprehension of its commandments and wisdom.¹

The Qur'an's relationship with science has been discussed for centuries, with scholars debating whether to use science as an exegetical tool to elucidate its meanings. The 14th century scholar Al-Shatibi disputes the claim that the Qur'an includes knowledge of the natural sciences.²

which means علمجَنيْنٌ or (علم الأجنة) which means "the scientific study of embryos". In other words, the branch of biology that studies the formation and early development of living organisms.

Islam stands an incomparable religious conviction among other religions in all over the world. The reason is that every single aspect of human and social life, both the mundane and the spiritual is covered by it. The Holy Our'ān states;

"There is not an animal (that lives) on the earth, nor a being that flies on its wings, but (forms part of) communities like you. Nothing have we

omitted from the Book, and they (all) shall be gathered to their Lord in the end." (al-Qur'ān, al-An'am 6:38)

It is more miraculous and amazing that the Qur'ān pronounced actualities of a scientific and logical nature that not at all other humanoid could have developed possibly at that time (earlier than 1400 years) and without having a single mistake.

There are a number of authors who have written on Qur'anic human embryology alike Dr. Keith, L. Moore (in company with Abdul Majīd al-Zindānī, co-author) and Dr. Maurice Bucaille. Such exertions are used by Dr. Al-Zeiny, Dr. Ibrahim Syed, Dr. Sharif Kaf al-Ghazal, Dr.ZākirNāik, HārunYaḥya and many other renowned scholars etc. A worthy additional material (in theory shape) is delivered by Dr. Omar 'AbulRehman where there he struggles to authenticate the Qur'anic "human reproduction" verses alongside current scientific information.

Early in 1980, the Prof.Dr. Keith L. Moore, formerly working as an anatomist at the Toronto University Canada, brought out a superior version of their textbook on embryology. The ordinary edition that has been broadly taught in medical institutes in vicinity of the world. Seemingly once he recites what the Glorious Qur'ān mentioned and had been told on the subject of the development and growth of human embryo then he went on surprised away the meticulous accurateness of the declarations that were recognized times before in the seventh century, in the past the embryological science was even established³. Most has been subsequently recorded by Muslims in an effort to reveal that the Holy Qur'ān (God's ultimate revelation) contains declarations regarding human development (fetal growth) inside the mother's womb which could not have been illustrious in the period when it was declared to the Prophet Muhammad (Upon whom be peace and greeting). Without a doubt, recently a number of books confirm the magnitude to which this has been taking place.

In the Holy Qur'ān, there are nearly sixty sacred verses that accord unambiguously to reproduction of human being, development and birth, though such verses are disorderly throughout the Holy Qur'ān.

Allah (the Almighty) says in the Righteous Qur'ān;

"We will show them our signs in the horizons and in their own souls, until it appears to them that this is the truth." (al-Qur'ān, Fussilat 41:53)

Stages of Human Reproduction

The Glorious Qur'ān did not stopover here, but has pronounced much elaborate details on the topic of the creation and formation as well as reproduction of human beings. Human reproduction, as modern science states, takes place in a number of different and unique stages. The Glorious Qur'ān mentions it as follows:

"God created you in stages" (al- Qur'ān, Al Jinn 71:4)
In another verse it is underlined:

"(Allah) creates you inside the bodies of your mothers, in stages, one after another." (al-Qur'ān, Az-Zumar 39:6)

The Righteous Qur'ān revealed the human creation and formation process long in the past than scientific methodical study of part of material world presented each portion of the human anatomy, under the internal contents and substances of his separate cells, different and uncommon name as well as pictographic description. Miraculously, in the Glorious Qur'ān, Allah (the Almighty) well-defined the sequential stages of development and growth of human embryo and fetus earlier than fourteen centuries, long before the ultrasound was invented.

With the accordance of the Qur'anic verses, Dr. Muhammad SulṭānShāh describes in his article that the Holy Qur'ān distributes the human's creation and formation process in seven stages. According to it, there is a comprehensive resemblance between the revealed message (the Qur'ān and the Hadith) as well as modern scientifically established knowledge. The verse mentioned below describes these stages:

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وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سُلْلَةٍ مِّنْ طِيْنٍ 12
ثُمَّ جَعَلْنُهُ نُطْفَةً فِيْ قَرَارٍ مَّكِيْنِ 13
ثُمَّ خَلَقْنَا النَّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ۖ ثُمَّ أَنْشَانُكُ
خَلَقْنَا النَّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظْمًا فَكَسَوْنَا الْعِظْمَ لَحْمًا ۖ ثُمَّ أَنْشَانُكُ
خَلَقًا أَخَرَ ۖ فَتَلِرَكَ اللَّهُ أَحْسَنُ الْخُلِقِيْنَ 14
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"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 (foetus) lump; then we made out of that lump bones and clothed the bones with flesh; then we developed out of it another creature. So blessed be Allah, the best to create!" (al-Qur'ān, Al-Mu'minoon 23:12-14)

By means of the Qur'anic terminology, these above mentioned verses evidently without any doubt define the developing period or phases of Qur'anic embryology that can be enumerated as follows:

- 1. Sulalat min Tīn
- 2. Nutfah
- 3. 'Alaqah
- 4. Mudghah
- 5. 'Izām
- 6. Lahm
- 7. Khalq e Akhar

1. Sulalat Min Ţīn

The word "Sulalah" means quintessence (essence or extract of something i.e. clay). It is also demarcated as "from an extraction of purified clay"⁴. It may be meant as product of wet earth or elements of earth. This stands for inorganic stage of human being creation. Through modern scientific knowledge, it is known that the constituents of female's ovum and male's sperm are ultimately derived from the earth. One and only single spermatozoa, which penetrates (enter) in the ovum makes zygote. The process is called fertilization.

2. Nutfah

The Arabic word "nutfah" is repeated 11 times in various chapters of the Glorious Qur'an in different contexts. This word has quite a few meanings. It has been mainly understood two different ways⁵. One is sperm or semen, and the other is zygote. Out of all one definition for "nutfah" is that Hamza has sited much prominence on is, "a singular object that is a part of superior group of its kind". The dictionary meaning of this word is "Drop of watery fluid (semen)".

Modern science has long-established in contemporary period that merely one out of averagely of 3 million male's sperms is depended upon for reproduction and fertilizing of the female's ovum. It indicates that just a one over three millionth part (1/3000000) of the extent of male's sperms which are discharged is needed for reproduction and fertilization.

"Verily We created Man from a drop of mingled sperm, in order to try him: So We gave him (the gifts), of Hearing and Sight." (al-Qur'ān, Al Insan 76:2)

According to the different verses of the Glorious Qur'ān the word "nutfah" is mentioned in three diverse indicating contrast interwoven associations, the female nutfah, the male nutfah and the mingled nutfah from both male and female nutfahs combined and entirely mixed in each other that expressed in the Holy Our'ān as "NutfahAmshāi".

Modern scientists use the word "nutfah" in a broad term and it may include:

- 1. Male and female gametes [gametogenesis] (spermatogenesis in male and oogenesis in female)
- 2. Zygote [fertilized egg] (result in from an ovum fertilization by a sperm)
- 3. Morula (the solid mass of 12 to 16 cells, blastomeres, three days after fertilization)
- 4. Blastocyst (a mass consist of cells which shapes initially in the embryo's developing take place 5 days later fertilization)

Consequently "nutfah" not only refers to the male and female gametes and zygote but also it used for the initial stages of embryo.

3. Alaqah

A century's dictionary "Lisān al-'Arab" mentions that "'Alaqah" regards as a worm (leech) existing in water which sucks blood. The linguistic meaning of "'Alaq" is "leech", "medicinal leech", "blood clot", "coagulated blood" or "the initial stage of embryonic period". In such a manner the Arabic term "'Alaqah" is using in three different meanings as: Suspended Thing, Leech and blood clot

The word "'Alaqah" is mentioned in the following verses of the Glorious Qur'ān:

"It is He Who has created you from dust then from a sperm-drop, then from a leech-like clot;" (al-Qur'ān, Ghafir 40:67)

An embryo gains nutrition from mother's blood (starts feeding on the blood of mother), alike to a leech that attain nutriment from blood of individuals. According to 'alaqah is "suspended thing", that indicates the hanging of embryo in the womb of the mother for the period of the 'alaqah stage. And according to the definition "blood clot", in the embryo, during this stage, the blood doesn't circulate up to the completion of 3rd week of gestation⁹. In a Research entitled "Embryology in the light of the Qur'ān and the Sunnah" in first world seminar on Scientific Miracles in the Qur'ān and the Sunnah held at Islamabad, Pakistan in 1987, the following was declared:

In accordance with the meaning for the word 'alaqah "the coagulated or thick blood" discovers that the outside appearance of fetus and its membranes look a clot like thick coagulated blood for the reason that the cardiovascular veins, preliminary heart and placenta bag appear at this stage. The blood is stuck in the blood vessels even the blood is in liquid form (not coagulated). The blood begins its circulation later the end of the 3rd week of gestation. The embryo is finishing the "alaqah" stage at 24th to 25th days after conception.

4.Mudghah

The word in Arabic "mudghah" termed as "chewed substance". The Qur'ān indicates the term "mudghah" as the 3rd stage of human reproduction. Rendering to linguistic Arabic dictionaries, the word "mudghah" has quite a few meanings as under:

- 1. The first meaning is "somewhat that has been chewed by the teeth".10 Due to the changes in its center of gravity by way of new tissue formation, the embryo lies down its physical shape, alike to the turning of a substance by way of chewing.
- 2. According to 2nd interpretation is unified in the plagiaristic meaning "mudagh al-um'ur" that signifies "the small substances",11 the human embryo in length is just about 1.0 cm during this developing period and hence is much tiny in size. All human organs are formed in the period mudghah such as small buds.
- 3. 3rd interpretation of the word "mudghah", "a piece of meat of a size that can be chewed"12. This is almost 1.0 cm in length. This is just about the size (length) of a constituent that would be chewed. The forgoing stage of "alaqah" is not a magnitude to be chewed as well as its size is not more than 3.5 mm.
- 4. The fourth meaning is "as being partly formed and partly unformed"13. A number of organs (mini structures) will shape in this (mudghah) stage and few others will shape in far ahead developing stages. The "mudghah" stage finishes at the completion of the sixth week of gestation. The Glorious Qur'ān refers to this reality as follows:

"Then out of a morsel of flesh, partly formed and partly unformed". (al-Qur'ān, Al-Hajj 22:5)

The embryo is finishing the "'alaqah" stage at 24th to 25th days after conception. Then it changes and modifies at 26th to 27th days into the

"mudghah" stage. The revolution or transformation of the embryo from 'alagah stage to mudghah stage is actually very rapid. This prompt transformation (complete change) is pronounced in the Righteous Qur'an with using of the conjunction "fa" means "then, with no delay". The Arabic term "fa" shows a fast or rapid series of events.

The features, senses and outlines of the embryo have been accomplished, while the other still residues imperfect. Allah Almighty, in this way, has indicated that later the formation of mudghah some embryos are made into faultless, perfect and without any defect human beings, while some other remain incomplete.

5. 'Izām

The Qur'anic word "'Izām" termed as "the bones". After the mudghah stage, cartilaginous skeleton inaugurates to form, by the starting of the seventh week, and ultimately the embryo with the formation of skeleton, takes the human being shape. With accordance of modern scientific knowledge, we come to know that the predecessors of muscle and bones are formed by the first 40 days of pregnancy. Prior to 42 days, the image of human embryo cannot be differentiated from the embryo of other animals while after these days it turns out to be evidently distinguishable.

الَّذِيْ خَلَقَكَ فَسَوِّ بِكَ فَعَدَلَكَ: The holy Our'anstates that

"Who created you, proportioned you, and balanced you?" (al-Qur'ān, Al- Infitār 82:7)

This verse is seeming that the "'Izām" stage matched up by means of the straightening or erect stage. The word "sawwak" in the declaration of the Qur'ān point out the statements as under:

- I. To make straight position of a thing from the curved position.
- II. To make uneven to form smoothed.

Human embryo at 7th week of gestation has a curved, therefore, presenting the appearance of alphabet letter "C" during "mudghah" stage. In "'Izām" stage, the embryo's curving position is now smooth and straight and the surface of the embryo become more even because of the disappearance of depressions and prominences.

6. Lahm

This "lahm" word in the Qur'an termed as "the muscular flesh". Earlier than 1400 years this process was unknown. It is supposed that both muscles and bones developed at the same time. With the advancement of science micro cameras introduced into the pregnant woman's uterus confirmed once again that the Qur'ān is a revealed message from the Almighty God. The Qur'ān elucidates:

"Look further at the bones, how We construct them and then cover with flesh (lahm)". (al-Qur'an, Al-Baqarah 2:259)

The human skeleton, marvel of engineering, is formed of almost 206 bones of different sizes. These are towers prepared with bones attached by each other with ligaments and joints, supporting to the human beings including bend, jump, run, sit, etc. For turning a page of book, requires the contemporary movements of the fingers, wrist, elbow and shoulder.

In addition, the human skeleton has a lubricating (oiling or greasing) system. Every single joint in the human bodies (skeleton) is lubricated on a regular basis with particular oily constituents. The Qur'ān in a verse that: "Look further at the bones", inducements our attention to these facts that form, but a small portion of man's marvelous makeup. Formation and development of muscles begins and the fetus (embryo) starts moving and muscles hold their position far and wide the bones. Hence, later the accomplishment of muscle establishment (myogenesis), the fetus is able to start movement.

7. KhalqĀkhar

It stands for the last phase of embryonic development. The Arabic words "Khalq" term as creature or creation and the word "Ākhar" means last or end days. Therefore "KhalqĀkhar" may means as closing stage in the development and formation of human embryo. A number of reviewers have concentrated "KhalqĀkhar" into "another creation". Although recent scholars use the word as "new creation" for the translation of "KhalqĀkhar".

This stage takes a period of approximately three weeks. This has been directed using the Arabic conjunctive article "thumma" (then), that indicates a time break in the middle of clothing bones with "laḥm" and comes to a new creature. Allah the Almighty reveals in the Glorious Our'ān:

"Then We developed out of it another creature. So blessed be Allah, the best to create" (al-Qur'ān, Al-Mu'minoon 23: 14).

Dr. Muhammad Tahir al-Qadri observes that the "new creation", revealed in the later part of the above mentioned verse, talks about the human No:3

embryo which formed at the completion of 8th week of gestation and at that moment, in embryology, it is designated as fetus¹⁴.

At this stage the human embryo makes over into a new creature, by way of the size of limbs, body and head begin to be well-adjusted as well as regular among the 9th& 12thgestational week. By the 10th week of gestation, external genital parts come into sight in addition to the skeleton improves anatomical framework as of flexible cartilaginous to inflexible or hard calcic bones by the end of the week twelve. The limbs as well as fingers are eminent at this week. Sexual category of the embryo (male or female) is visible through the clear appearance of the genitalia.

Nutrition and Protection of the Embryo:

The mother's womb provides nutrition and appropriate atmosphere for the fetus to grow well till the stage of labour.

The righteous Qur'an enlightens this as a meticulous remark in Surah az-Zumar:

"He creates you in the wombs of your mothers in stages, one after another, in three veils of darkness." (al-Qur'ān, Az-Zumar 39:6)

According to modern scientific interventions, the embryologists, are agreed that the human fetus, all the while developmental phases, is surrounded with following three membranes:

- 1. One of these membranes is the amniotic membrane that comprises a watery fluid incorporating the fetus to make it in swimming state, in consequence protecting the fetus from trauma which the uterus encounters and comforts the fetus movements for reposition easily during labour.
- 2. The second is chorionic membrane. It consists of the amnion membrane and is component of the placenta.
- 3. The third is deciduous membrane. These are the endometrium lining during pregnancy that forms the placenta.

A number of intellectual take to mean the "three veils of darkness" as the amnion membrane surrounding uterus, wall of the uterus, and abdominal wall.

Development of Sense Organs

The order of the development of sense organs has also been told in the Our'an. The following verses tell us that the organs of hearing (ears) appear first, then organs of sight (eyes) are developed and in the last, human brain is developed that is an organ of feeling and understanding. Now ponder over the following verses:

"And He gave You (the faculties of) hearing and sight and feeling (And understanding)" (al-Qur'ān, As-Sajdah 32:9)

Subsequently the passing of nine lunar months (38 weeks) of pregnancy, the human fetus is given the last touches to growth in the woman's uterus. At this moment, the time is, to go out once the completion of this definite period. Allah (the Almighty) says;

"And We cause whom We will to rest in the wombs for an appointed term". (al-Qur'ān, Al-Hajj 22:5)

Human Reproduction in the Light of the Hadiths

1. Hadith About Organogenesis

Formerly, Von Benden (1883) indicated that female egg and male sperm cells share the equal number of chromosomes (genetic material) to the embryo¹⁵.

There are quite a lot of hadiths approving this understanding. Among them one in the "Ṣaḥīḥ Muslim", the Imām al-Muslim reported from Hudhayfah Ibn Usayd (God be pleased with him) that the Prophet Muhammad (Upon whom be peace and greeting) said:

"When forty two nights pass by the nutfa or sperm-drop Allah (SWT) sends an angel and gives the embryo the shape. Then he creates his sense of hearing, sense of sight, his bones, his flesh, his skin, and then says: My Lord, would he be male or female? And your Lord decides as He desires and the angel then puts down that also". 16

Ānas bin Mālik (God be pleased with him) cited straightly from the Prophet Muhammad (Upon whom be peace and greeting) that:

"Allah (Almighty) has appointed an angel as the caretaker of the womb, and he would say: My Lord, it is now a nutfah or a spermdrop; my Lord, it is now a clot; my Lord, it has now become a chewed morsel, and when Allah (Almighty) decides to give it a final shape, the angel says: My Lord, would it be male or female or would he be an evil or a good person? What about his livelihood and his age? And it is all written as he is in the womb of his mother." 17

2. Hadith About Gender Determination

In accordance with modern embryological science, the fundamental action which concludes either the human embryo will progress into a female or a male, takes place in the 2nd half of gestational week six. The Holy Prophet Muhammad (Upon whom be peace and greeting) revealed the meticulous similar timeframe 1400 years ago. The first acknowledged trustworthy citations on this was delivered in the below mentioned hadith about the matter that has been linked by Ibn'Abbas. The Hadith states that:

"If the semen of Man comes over the semen of a woman, it will produce a male child by the will of Allah and if the semen of the woman comes over the semen of man it will produce a female child by the will of Allah". 18

3. Hadith About Ensoulment and Respiration

After the 120 days subsequently conception, at the 18th gestational week beginning, the respiratory circulation comes about. The ultimate stage of growth of the conceptus (human embryo or fetus) is started that is the entrance of the soul to embryo or fetus and then it turn out to be an existent "human person" in the legal wisdom.

As narrated from IbnMas'ūd by al-Bukhari and Muslim (God be pleased with them) in the Sahīhs:

"For every one of you, the components of his creation are gathered together in the mother's womb for a period of forty days. Then he will remain for two more periods of the same length, after which the angel is sent and insufflates the spirit into him." 19

4. Hadith About Hereditary Strain

The Messenger of Allah (Upon whom be peace and greeting) stated that genetic material (chromosomes) bear inheritable factors characteristic not only each of immediate parents and their siblings (family members), but also of ninety nine (99) strains for every single parent, reaching back from end to end the paternal and maternal family lines the whole way to the first male and female. The sacred Prophet (Upon whom be peace and greeting) even pronounced Arabic word by means of threading "salaka" in the similar way biogenetics defines DNA at present.

Ibn Rajab (God be pleased with him) said in his masterpiece Jāmi' al-'Ulūmwa'l-Ḥikām that IbnMandah and al-Tabarānī (God be pleased with them) in al-Taūhīd, among others, reported with a worthy chain of transmission of communication from Mālikibn al-Huwayrith (God be pleased with him) that righteous Prophet (Upon whom be peace and greeting) said:

"Truly, when Allah wants to create a servant, the man has intercourse with the woman and his water flies into every vein/strain (`irq) and nerve (`asab) of hers. When the seventh day comes, Allah gathers it up and brings before it every strain between it and Adam".²⁰

5. Hadith About Dominant Character and Gendering

The Prophet Muhammad (Upon whom be peace and greeting) categorized the recessive and dominant characters almost 1400 years ago, at what time he exposed that a strain or characteristic that lay intensely hidden for more than a few generations latent may give the impression another time down the line. He (Upon whom be peace and greeting) furthermore renowned the comparison of genetics laws in human beings with those in animals.

Hadith related dominant character in narrated by Imam Muslim (God be pleased with him) from Thawban (God be pleased with him) that:

"While I was standing beside the Prophet (God be pleased with him), one of the rabbis of the Jews came [...] then said: "I have come to ask you about something no one on earth would know except a Prophet [...]. I have come to ask you about the child." The Prophet said: "The fluid of the man is white and that of the woman yellow. When they unite and the male fluid prevails upon the female fluid, their child is male (adhkaraa) by Divine permission. When the female fluid prevails upon the male fluid, their child is female (aanathaa) by Divine permission." The Jew said: "What you said is true; you are truly a Prophet!" He turned and went away. The Messenger of Allah said: "This man just asked me about things of which I had no knowledge whatever until Allah had that knowledge brought to me!". 21

6. Hadith About Recessive Character

Sometimes a recessive allele might be masked (prevailed) by a dominant allele in one generation but reappear in a later generation.

The word "irq" in the below mentioned hadith of Prophet Muhammad (Upon whom be peace and greetings), gives the impression to approximate this theory.

A person came to the Prophet from BanuFazara tribe and said: My spouse has born a child who is black, upon which Allah's Apostle (Upon whom be peace and greeting) said: Do you have any camels? The person replied: Yes. He (Upon whom be peace and greeting) again said: What is this

colour? The person replied: They are red. He (Upon whom be peace and greeting) said: Is there a greyish one among them? The person said: Yes, there are greyish ones among them. He (Upon whom be peace and greeting) said: In what way or manner has it befall? The person said: It is perhaps the strain (`irq) to which it has reverted, whereupon he (the Prophet) said: It is perhaps the strain (`irq) to which he (the child) has reverted.²²

There are a number of features whose materialization, which effect on an individual, is subject to particular circumstances. The expression of stars on the sky be subject to the existence of night; the sun blocks their sight, in the same way, certain recessive features are influenced through dominant features. Recessive appearances will take effect as soon as they clear away their inspiration. Conceivably, this turn out to be possible several generations later.

The religion Islam be in favor of human rights and impartiality. It is inherently and naturally probable for both parents having a light facial appearance to endure a darker complexioned offspring. Understanding hereditary potentials could prevent false allegations of paternity and subsequent mishandling of innocent persons, particularly women.

A rare "mursal" narration from a Tabi' Ibn Burayda (God be pleased with him) in Asl 148 of al-Ḥakīm al-Tirmidhī'sNawādir al-Usūl identifies ninety nine prospective heritable strains each parent:

"The wife of a man from the Ansar bore him a black child. He took her by the hand and went to see the Messenger of Allah. She said: "I swear by the One that sent you with the truth! He married me a virgin and I never seated anyone in his place since!" The Prophet (Upon whom be peace and greeting) said: "You speak the truth. You have ninety-nine strains and so does he. On the time of conception all those strains shudder and there is none but it asks Allah Most High to determine resemblance through it."

7. Hadith About Congenital Deformity

More than a few citations referred to the Sunnah of Prophet Muhammad (Upon whom be peace and greeting) are reliable by means of the actuality of different hereditary mechanisms which are at the present acknowledged to be expected for abnormal and normal human beings development.

The holy Messenger of Islam (Upon whom be peace and greeting) instructed his followers in a number of hadiths in regards that in what

manner an individual might deal with sickness or disease. Similarly, this takes into account of congenital malformation (anomalies) as they are just categories of sicknesses an individual may perhaps have these only in the course of pregnancy. These be situated not "faults" but actual consequences of environmental influences, be it acknowledged as a reason of gene imperfection or unidentified reason of such imperfection.

The sacred Prophet Muhammad (Upon whom be peace and greeting) defined the status quo of the "healthy" newborn baby as "al-fitrah" (the pristine state) as well as equated this embryonic perfection by way of the religious conviction of Islam (the natural religion). In the course, He made allusion to the reality that malformation in the offspring is as rare close to inexistent.

Ṣaḥīḥ al-Bukhārī, Ṣaḥīḥ Muslim, the Musnad and the four Sunan narrated from AbūHuraira (God be pleased with him) that the messenger of Allah (Upon whom be peace and greeting) said:

"There is no child born except in pristine disposition (fitra). Then the two parents turn their child into a Jew, a Christian, aMagian. Likewise, the animal gives birth to a fully formed calf. Do you see in it the least disfigurement?"²³

Conclusion

we conclude the concepts of human reproduction viewed under the light of the Glorious Qur'ān (word of God) and the hadiths of the Prophet Muhammad (Upon whom be peace and greeting) in relation with modern embryology sciences. This is in itself marvelous that an unlettered man started to recite verses of literary genius. What is more amazing and miraculous that he pronounced truths of a scientific nature that no other human could possibly have developed at that time (1400 years age) and without making a single error.

Everything in the Qur'ān is explained in simple terms which are easily understandable to man and in strict accordance with what was to be discovered much later on.

Therefore, not a single thing in modern science is in contradiction to the Qur'ān. For instance, we have realized at present that modern science, in reality, approves what the Qur'ān had already revealed. It is unfortunate that such assignment which was consigned to Muslims, is being accomplished by the non-Muslims. It is mystery that the Muslims of the

modern age are not leading the world, even though they have in hand the direction of the conscientious Qur'ān. The former Muslims discovers and innovates through experimentations, by way of this matter-of-fact they stand the inaugural of the time being science.

So far, Allah Almighty knows best.

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