

## A Comparative Study of Human Creation from the Perspective of the Holy Qur'an and Science and Criticizing the Misconceptions

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### بررسی تطبیقی شکل‌گیری خلقت انسان از منظر قرآن کریم، علم و نقد شبهات آن

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#### Abstract:

Raising issues thereby man is guided to the Right Path, the Holy Qur'an refers to scientific issues. One of the most important axes in the Qur'an is the origin and creation of man. The quality of his creation and the origin of his life are discussed fluently in 76 verses of 41 Surahs. With the growth of embryology in the twentieth century, some have sought to adapt such verses to it to clarify the truths of the Qur'an to the audience, while others have challenged such verses and raised misconceptions such as inconsistency of embryonic stages in the Qur'an with the embryology, semen coming out of the spine and ribs (*solb* and *tarā'ib*), devaluating semen, the creation of the fetus from the male sperm and not paying attention to the role of the female sperm, determining the time of the fetus sex, describing sperm as *amshāj*, the difference of 'alaq without "tā" and with "tā", the difference between the adding letters of "thumma", "fā", and so on. As a result, the confirmation of embryological knowledge by the valuable Qur'anic teachings in the study of human creation is proved. Also the mentioned misconceptions have basic problems, for the issues referred in the Qur'an are consistent with the findings of modern science, as well as, there are reasonable answers to all these doubts and differences.

**Keywords:** Qur'an, Human Creation, Science, Critique of Misconceptions.

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#### چکیده:

قرآن کریم در قالب طرح مباحثی که انسان را در مسیر هدایت قرار می‌دهد به بعضی از مسائل علمی اشاره می‌کند. یکی از محورهای مهم و مورد توجه در آیات قرآن، موضوع پیدایش و مراحل خلقت انسان است که در ۷۶ آیه از ۴۱ سوره قرآن با بیانی شیوا به کیفیت خلقت انسان پرداخته شده و به‌عنوان نقطه آغاز زندگی انسان مطرح گردیده است. با رشد علم جنین‌شناسی در قرن بیستم، برخی درصدد تطبیق این‌گونه آیات با علم جنین‌شناسی برآمده‌اند تا حقایق قرآن بر مخاطبین روشن شود و برخی دیگر این‌گونه آیات را به چالش کشیده‌اند و شبهات و موارد اختلافی از جمله: عدم هماهنگی مراحل جنین در قرآن با علم جنین‌شناسی، خروج منی از بین ستون فقرات و دنده‌ها (صلب و ترائب)، پستان‌نگاری آب منی، آفرینش جنین از نطفه مرد و عدم توجه به نقش نطفه زن، تعیین زمان جنس جنین، نطفه با صفت امشاج، تفاوت علق بدون «تاء» و با «تاء»، اختلاف بین حرف عطف «ثم» و «فاء» و... را مطرح کرده‌اند. حاصل این پژوهش، تأیید دانش جنین‌شناسی بر آموزه‌های ارزشمند قرآنی در بررسی خلقت انسان است و اینکه شبهات ذکرشده اشکال مبنایی دارند و مطالب مطرح‌شده در قرآن با یافته‌های علوم جدید سازگار هستند و برای همه این شبهات و موارد اختلافی پاسخی مستدل وجود دارد. این تحقیق به روش توصیفی - تحلیلی و با گرایش انتقادی به انجام رسیده است.

**کلمات کلیدی:** قرآن، خلقت انسان، علم، نقد شبهات.

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## Introduction

The Holy Qur'an is a universal book and is not dedicated to a specific science or discipline. The purpose of the revelation of the Qur'an is to guide human beings. In many verses that have been called scientific verses and refer to the quality of human creation and the course of the embryonic stages, we should not expect all the scientific cases and details to be stated. Mentioning scientific miracles is not a reason for the details of the experimental sciences. If there is a difference in the appearance of the verses and the lack of attention to detail and continuity of its stages in the Qur'an, it indicates the relativity of the natural sciences, because the results of the natural sciences may become obsolete with the advancement of technology.

Indeed, it can be acknowledged that the description of the various stages of human creation, even when the human was unable to observe the dark environment of the womb, can be considered the greatest confirmation of the miracle of the Qur'an. Of course, with the advancement of embryology, some opponents and deniers of the Qur'an challenged the verses related to the fetus in the Qur'an and raised doubts about them.

Thus, the study of the biblical accounts of the stages of human evolution is the greatest evidence of the revelation of the Holy Qur'an and the divine wisdom and power in the creation of this complex being. Although the people of the time of the revelation of the Qur'an were not aware of these sciences, but it used interpretations that are understandable to the people of that period. The Holy Qur'an and, consequently, the tradition of the Holy Prophet (PBUH) have expressed these scientific facts in a simple and at the

same time very scientific way more than 1400 years ago. In this research, by relying on divine verses, the quality of human creation, which includes six stages, has been studied:

1- Knowing the origin of creation (interpretation of soil, sticky mud and dried mud).

2- Human origin from sperm (the same as a zygote or fertilized cell).

3- Conversion of sperm to clot (the most important part of the beginning of the formation of creation).

4- The beginning of the initial growth of fetal components (in the form of lump of flesh).

5- The beginning of the movement of the fetus and the completion of the appearance of the fetus (turning the cheekbone into bone and growing flesh on the bone).

6- Blowing the divine spirit in the fetus (real and spiritual identity of man).

In this research, in addition to the semantics of sperm and related words, by applying the verses of creation and embryology and criticizing and examining views in this field, some doubts are pointed out and they are given documented and reasoned answers.

## 1. Man and its synonyms in the Qur'an

Man is mentioned in several words in the Holy Qur'an: *Insān* (Aṣr: 2; Ḥijr: 26; Naḥl: 4; Mu'minūn: 12; Sajdah: 7; Yāsīn: 77; Rahmān: 14; Insān: 2). *Banī Ādam* (Yāsīn: 60). *Bashar* (Fuṣṣilat: 6; Shu'arā: 154). *Nās* (Isrā': 60). *Unās* (Baqarah: 60). *Ins* (An'ām: 112). *Insī* (Maryam: 26). *Unāsī* (Furqān: 49).

But the word "*Ādam*" is a special name and belongs to the father of humans and the first man. Each of these

words may be different, but they all refer to a specific entity.

## 2. The formation of human creation

There are many verses with different interpretations about the creation of man, but these interpretations can be combined. Some of them say: "God created man from nothing". As in verse 67 of Surah Maryam: "Doth not man remember that We created him before, when he was naught?"<sup>1</sup> The verse 1 of Surah Al-Insān: "Hath there come upon man (ever) any period of time in which he was a thing unremembered?"<sup>2</sup> and the verse 9 of Surah Maryam: "He said: So (it will be). Thy Lord saith: It is easy for Me, even as I created thee before, when thou wast naught."<sup>3</sup>

These verses have been interpreted for all human beings who have been created from nothing and are interpreted in the verbal term "creation from non-existence". But in other verses it is stated that man is created from dust and water. Therefore, he had raw material and his creation was from nothing; like the verse 5 of Surah Hajj: "We have created you from dust,"<sup>4</sup> or the verse 54 of Surah Al-Furqān: "And He it is Who hath created man from water, and hath appointed for him kindred by blood and kindred by marriage"<sup>5</sup>

About these two groups of verses, it can be said that the human body was created from dust, water or mud, but in order for man to be created, something must be added to it, and that thing was not matter itself, and that is human form

or human soul or spirit. (Miṣbāḥ, 1989: p. 331).

In verses 5 and 6 of Surah Tāriq and 4 of Surah Nahl, it is stated that man was created from jumping water. All these verses are collectible; because all human beings except Adam were created from sperm and the sperm is "water", also the sperm is a jumping water. Sperm has been made from food. These materials are also made from plant and animal materials, all of which are rooted in the soil and fed on soil.

So it is correct to say that humans were created from dust; with the difference that Adam was created from dust without intermediaries and other human beings are from soil through intermediaries, but they were created directly from sperm and water. It is noteworthy that according to the verses of the Qur'an, Eve was created from Adam; it is stated in Surah An-Nisā', verse 1: "O mankind! Be careful of your duty to your Lord Who created you from a single soul and from it created its mate and from them twain hath spread abroad a multitude of men and women."<sup>6</sup>

In Surah A'rāf: 189, the word "Ja'ala" (i.e. put) has been used instead of the word "Khalaqa" (i.e. created): "He it is Who did create you from a single soul, and therefrom did make his mate that he might take rest in her."<sup>7</sup>

There have been many debates by commentators about what is meant by the creation of Eve from a single soul, i.e. Adam. Ṭabrisī says: «خلق منها زوجها» i.e. Eve has been created from one side of

١. «أَو لَّا يَذْكُرُ الْإِنْسَانُ أَنَا خَلَقْنَاهُ مِن قَبْلُ وَ لَمْ يَكُ شَيْئًا».  
٢. «هَلْ أَتَى عَلَى الْإِنْسَانِ حِينٌ مِّنَ الدَّهْرِ لَمْ يَكُنْ شَيْئًا مَّذْكُورًا».  
٣. «قَالَ كَذَلِكَ قَالَ رَبُّكَ هُوَ عَلَى هِينٍ وَقَدْ خَلَقْتِكَ مِن قَبْلُ وَ لَمْ تَكُ شَيْئًا».  
٤. «فَإِنَّا خَلَقْنَاكُمْ مِن تُرَابٍ».

٥. «هُوَ الَّذِي خَلَقَ مِنَ الْمَاءِ بَشَرًا».  
٦. «يَا أَيُّهَا النَّاسُ اتَّقُوا رَبَّكُمُ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَ خَلَقَ مِنْهَا زَوْجَهَا وَ بَثَّ مِنْهُمَا رِجَالًا كَثِيرًا وَ نِسَاءً».  
٧. «هُوَ الَّذِي خَلَقَكُمْ مِنْ نَفْسٍ وَاحِدَةٍ وَ جَعَلَ مِنْهَا زَوْجَهَا لِيَسْكُنَ إِلَيْهَا...».

Adam (Ṭabrisī, 2008, vol. 1: p. 233). Allameh Tabataba'i rejects Ṭabrisī's view and says: "Some have proposed this interpretation following some news, but this statement is not correct." Allameh believes: The meaning of this verse is that Eve is the same as Adam and there are similarities. Like other verses that address all men and say: God has created for you wives from your own soul, like: "And of His signs is this: He created for you helpmeets from yourselves that ye might find rest in them"<sup>1</sup> (Rūm: 21) (Tabataba'i, nd, vol. 4: p. 139).

### 2-1. The creation of man from dust

In many verses, God has referred to the creation of man from dust:

"Verily We created man from a product of wet earth"<sup>2</sup> (Mu'minūn: 12).

"And of His signs is this: He created you of dust"<sup>3</sup> (Rūm: 20)

"Allah created you from dust"<sup>4</sup> (Fātir: 11)

"He it is Who created you from dust"<sup>5</sup> (Ghāfir: 67)

"We have created you from dust, then from a drop of seed, then from a clot, then from a little lump of flesh shapely and shapeless"<sup>6</sup> (Hajj: 5)

"Who created thee of dust, then of a drop (of seed), and then fashioned thee a man"<sup>7</sup> (Kahf: 37)

"Lo! the likeness of Jesus with Allah is as the likeness of Adam. He created

him of dust, then He said unto him: Be! and he is"<sup>8</sup> (Āli 'Imrān: 59)

"And when We said unto the angels: Fall down prostrate before Adam and they fell prostrate all save Iblis, he said: Shall I fall prostrate before that which Thou hast created of clay?"<sup>9</sup> ('Isrā': 61)

"(Iblis) said: I am better than him. Thou createdst me of fire while him Thou didst create of mud."<sup>1</sup> ('A'rāf: 12)

"We created them of plastic clay"<sup>1</sup> (Sāffāt: 11)

"Verily We created man of potter's clay of black mud altered"<sup>1</sup> (Hijr: 26)

"He created man of clay like the potter's."<sup>1</sup> (Rahmān: 14)<sup>3</sup>

A few points can be deduced from these verses:

A) Scientists emphasize that all the constituent elements of man are present in the soil; because human sperm is born of various foods that originate from plants and animals. Animals also feed on plants and plants take their desired part from the soil. Therefore, the human sperm that later becomes human is the soil material, and this is what the Qur'an speaks of.

Interestingly, scientists have recently discovered that the human body is made up of elements present in the soil and are discovering new secrets from the soil every day; one of these discoveries is that some types of mud contain antivirals that can be effective in killing germs; that is why today they are

١. «وَمِنْ آيَاتِهِ أَنْ خَلَقَ لَكُمْ مِنْ أَنْفُسِكُمْ أَزْوَاجًا لِتَسْكُنُوا إِلَيْهَا...».

٢. «وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سَلَالَةٍ مِنْ طِينٍ».

٣. «وَمِنْ آيَاتِهِ أَنْ خَلَقَكُمْ مِنْ تُرَابٍ...».

٤. «وَاللَّهُ خَلَقَكُمْ مِنْ تُرَابٍ...».

٥. «هُوَ الَّذِي خَلَقَكُمْ مِنْ تُرَابٍ...».

٦. «فَإِنَّا خَلَقْنَاكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُضْغَةٍ مُخَلَّقَةٍ...».

٧. «...خَلَقَ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ سَوَّكَ رَجُلًا».

٨. «إِنَّ مَثَلَ عِيسَى عِنْدَ اللَّهِ كَمَثَلِ آدَمَ خَلَقَهُ مِنْ تُرَابٍ ثُمَّ قَالَ لَهُ كُنْ فَيَكُونُ».

٩. «وَإِذْ قُلْنَا لِلْمَلَائِكَةِ اسْجُدُوا لِآدَمَ فَسَجَدُوا إِلَّا إِبْلِيسَ قَالَ أَأَسْجُدُ لِمَنْ خَلَقْتَ طِينًا».

١٠. «...قَالَ أَنَا خَيْرٌ مِنْهُ خَلَقْتَنِي مِنْ نَارٍ وَخَلَقْتَهُ مِنْ طِينٍ».

١١. «إِنَّا خَلَقْنَاهُمْ مِنْ طِينٍ لَازِبٍ».

١٢. «وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ صَلْصَالٍ مِنْ حَمَلٍ مَسْنُونٍ».

١٣. «خَلَقَ الْإِنْسَانَ مِنْ صَلْصَالٍ كَالْفَخَّارِ».

thinking of making vaccines using soil (Ismailzadeh, 2012: p. 22).

**B)** Only Adam was created from dust and the rest of human beings were created from sperm, but it can be said that human beings were created from dust through Adam.

**C)** A significant part of the human body is "water" and the other part is "oxygen" and "carbon" which are not taken from the soil. Scientists found that the composition ratio of all living creatures is more than 0.70 of water, and for this reason God said: "and we made every living thing of water" (Anbīyā' 30).<sup>1</sup>

God Almighty created man from water and soil, and then we see that a large part of the human body is made up of water, and by mixing water and soil, mud is formed, and this is what God says: "Verily We created man from a product of wet earth."<sup>2</sup> (Mu'minūn: 12) And since the main pillar of all body parts is made up of materials taken from the soil, this interpretation is completely correct that "man has been created from the soil" (Makarem Shirazi, 1993, vol. 4: p. 207; Mişbāḥ Yazdī, 1988: p. 330; Rezayee Isfahani, 202, v. 2: 437).

**D)** The basis of human creation from soil or mud, in addition to Islamic teachings, is found in Judaism and Christianity, as well as in the myths of human beings. It is mentioned in the thoughts of ancient Egypt, in the myths of Babylon (Shaleh, 1976: p. 244), in Sumerian myths, in the Aryan tribes and among them in the religion of Zoroaster, in the myths of Manichaeism, India, etc.)

Therefore, it can be concluded that all human beings were created from sperm whose raw materials came from food and foods from soil and that the origin of human creation is a combination of water and soil has been expressed in different words in the Qur'an.

## 2-2. The creation of man from a sperm

The Holy Qur'an in 19 surahs, using the word "Nuṭfah" i.e. sperm 11 times and the word "An-Nuṭfah" once, all of which are about the creation of man, reminds that man was created from "sperm" and uses this phrase as the first stage of the creation of the fetus. In the Qur'an, the factor of fertility and the emergence of the fetus are mentioned in several words, and for a thorough understanding, it is necessary to fully study the following four terms:

1- The absolute word "liquid".

2- "The mixed or spilled Liquid".

3- "Little or weak liquid".

4- "Semen". Regarding this stage of creation, verses are given in the Qur'an, such as:

"Then placed him as a drop (of seed) in a safe lodging."<sup>3</sup> (Mu'minūn: 13)

"And He it is Who hath created man from water,"<sup>4</sup> (Furqān: 54)

"...and we made every living thing of water," (Anbīyā': 30)

"Then He made his seed from a draught of despised fluid,"<sup>5</sup> (Sajdah: 8)

١. «وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ».

٢. «وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سُلَالَةٍ مِنْ طِينٍ».

٣. «ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ».

٤. «وَ هُوَ الَّذِي خَلَقَ مِنَ الْمَاءِ بَشَرًا».

٥. «ثُمَّ جَعَلَ نَسْلَهُ مِنْ سُلَالَةٍ مِنْ مَاءٍ مَهِينٍ».

“From a drop of seed. He createth him and proportioneth him,”<sup>1</sup> (‘Abas: 19)

“Hath not man seen that We have created him from a drop of seed?”<sup>2</sup> (Yasīn: 77)

“He hath created man from a drop of fluid,”<sup>3</sup> (Nahl: 4)

“Was he not a drop of fluid which gushed forth?”<sup>4</sup> (Qiyāmat: 37)

“From a drop (of seed) when it is poured forth,”<sup>5</sup> (Najm: 46)

“So let man consider from what he is created. He is created from a gushing fluid.”<sup>6</sup> (Tāriq: 5-6)

It is noteworthy that the Holy Qur'an, at the height of eloquence and rhetoric, has fully observed the literature in expressing sexual matters, and instead of being explicit in expressing the penis, has used the following interpretation: “That issued from between the loins and ribs.”<sup>7</sup> (Rezayee Isfahani, 2002, vol. 2: p. 437).

### 2-2-1. Sperm in Arabic dictionaries

Such as: "Al-'Ayn", "Aqrab Al-Mawārid", "Sihah Al-Lughah", "Lisān Al-Arab" and "Al-Taḥqīq" It can be understood that this word has six different uses: 1- Male sperm. 2- Clear and clean water. 3- Female sperm or egg. 4- Semen. 5 - Egg or fertilized egg. 6- Clear water that remained in the bottom of the bucket or musk.

### 2-2-2. Sperm in Persian translations

Many translators have preferred not to choose the Persian equivalent for the word "sperm" and to use the Qur'anic word itself in translation, such as:

1- Sperm: «Fooladvand, Āyatī, Khajavi, Rahnama, Bahrapour, Payende, Arfa, Ashrafi, Barzi, Payende, Pourjavadi, Mesbahzadeh, Noor, Nasfi, Safia Ali Shah, Amilī, Farsi, Kavianpour, Kowsar, Sha'rani, Yaseri, Al-Mizan, Bayan al-Saadah, Jawami al-Jami, Makhzan al-Irfan, Khajavi, Nouri, Ahsan al-Hadith."

2- Semen: insignificant and weak (Ilāhī Qumshī'ī); Scarce and worthless water (Ansarian); Rotten sperm water (Boroujerdi); Weak sperm (Tafsir Asan); Semen water (Ḥujjat al-Tafāsīr; Siraj; Dehlavi; Nobari); A mean sperm (Halabi); Male water (Khosravi); Back water (Kashf al-Asrar); Little fluid water (Ibn Manzūr, Rezayee); Insignificant sperm (Meshkini); A drop of water (Mu'izzī); Parental semen (Feyz al-Islam); A water from back (Rawḍ al-Janān); Weak semen flow (Ibn Manzūr, 1414, vol. 9: p. 335; Mustafawī, 1992, vol. 12: pp. 158-160).

In a narration, Imam Bāqir (AS) introduced water as the first creation of God and added: "Everything has been created from water" (Kulaynī, 1407, vol. 8: p. 96). Also, in another narration, the feature of this water has been introduced as having no history and lineage (Ḥuwayzī, 1415, vol. 4: p. 540).

### 2-2-3. The difference between the word “Nuṭfah” and the adjective “Amshāj”

Only once in verse 2 of Surah Al-Insān, among all the verses that refer to the stages of the fetus, does the word Nuṭfah (i.e. sperm) appear with the description “Amshāj” i.e. mingled. Amshāj from the

١. «مِنْ نَطْفَةٍ خَلَقَهُ فَقَدَرَهُ».

٢. «أَوْ لَمْ يَرِ الْإِنْسَانَ أَنَا خَلَقْنَاهُ مِنْ نَطْفَةٍ...».

٣. «خَلَقَ الْإِنْسَانَ مِنْ نَطْفَةٍ...».

٤. «أَلَمْ يَكْ نَطْفَةً مِنْ مَنِيِّ يَمْنَى».

٥. «مِنْ نَطْفَةٍ إِذَا تَمْنَى».

٦. «فَلْيَنْظُرِ الْإِنْسَانُ مِمَّ خُلِقَ \* خُلِقَ مِنْ مَاءٍ دَافِقٍ».

٧. «بَيْنَ الصُّلْبِ وَالتَّرَائِبِ».

article "Mashj" the plural of Mashj and Mashj (on the weight of Fals) means to mix, blend, mixed and blended (Qarashī, 1992, vol. 6: p. 259; Ibn Manzūr, 1414 AH, vol. 2: p. 767). According to Allameh Tabataba'i, it is based on its various components or on the fact that male water is mixed with female water (Tabataba'i, 1995, vol. 20: p. 190).

Despite the singularity of "Nuṭfah", the adjective "Amshāj" is plural; because Nuṭfah is composed of different components, it is considered as a plural and in fact an exaggeration in a lot of mixing (Ibn Ashur, nd, vol. 29: p. 346). But as to what the verse means by composition of Nuṭfah with Amshāj, there are various possibilities, the most important of which are:

1- It means the fusion and fertilization of male and female sperm that this view is the most common view among commentators after the revelation until now and it has been accepted by people such as Ṭabarī, Ibn Kathīr, Marāghī, Ṭabrisī, etc. However, in the year (1875 AD), Hertwig proved for the first time that both male sperm and female egg cell are effective in zygote development (Albar, 1405 AH, vol. 9: p. 20). But the Holy Qur'an illustrates this stage well in verse 13 of Surah Al-Mu'minūn and says: "Then placed him as a drop (of seed) in a safe lodging"<sup>1</sup>

2- The meaning is the combination of sperm from various elements and components.

3- Considering the plurality of the word Amshāj, it seems that the meaning of the Qur'an is different types of fusion and based on this, both aspects

mentioned can be considered in accordance with this verse. Thus, the meaning of "Nuṭfah Amshāj" refers to the role of both male sperm and female egg cell in the formation of the fetus.

#### 2-2-4. Disparagement of semen

One of the doubts raised is that "Mā' Mahīn" (i.e. disparaged water) means weak, mean, low and worthless water (Sajdah: 8). (Zukhruf: 5). (Qalam: 10). (Mursalāt: 20). However, in each drop of semen, there are millions of living sperm working with the necessary nutrients, water, and protective substances, and it is one of the greatest vital phenomena and one of the greatness of creation, and its disparagement is in conflict with modern science., (Suha, 2012: p. 149).

#### 2-2-5. Examination of "sperm" from the point of view of experimental science

From an embryological point of view, it has been proven that in every sexual intercourse between a man and a woman, about 200 to 300 million adult male sperm enter the female reproductive system. These adult sperm move their tails consciously in search of the fallopian tube to find the valve and climb over it to reach the egg, which is waiting for them in the vial near the ovary. In this journey, which takes about seven hours, of these hundreds of millions of mature sperm, only 200 to 300 can reach the egg, and the rest are destroyed and excreted, and only one succeeds in entering the egg and being fertilized. (Wei Sadler, 2015: p. 61). (Paknejad, 1984, vol. 1: p. 243).

<sup>1</sup> «ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ».

Maurice Bucaille writes: "Stem means part of the whole and what causes the egg to be fertilized is a sperm cell that is elongated" (Bucaille, 2007: p. 271; 2009, vol. 2: p. 428).

Therefore, from the semantic and Qur'anic use of the word "Mahīn", it can be concluded that the meaning of "Mā' Mahīn" is "weak liquid" and the meaning of "سائلة من ماء مهين" is "extract and summary of weak liquid". That is, God has made the creation of the human race from a small amount of weak fluid, and what has been said in embryology about the characteristics of male sperm and female egg cell also implies the meaning of being weak.

#### 2-2-6. Suspicion of the creation of man from the semen of man regardless of the role of woman

Dr. Suha has cast doubt on the verses of Surah Tāriq, saying: "Man is made of man's semen, because it has been said that man is made of jumping water: "He is created from a gushing fluid"<sup>1</sup> Because the woman has no semen at all and only has secretions in the wall of the genital tract and uterus that facilitate the transfer of sperm, and the woman's egg is released by the rupture of the ovarian wall and the water is not jumping. And if it is said that the human is made of the semen of man and woman, so God should attribute the jumping water to both of them, not one of them.

In addition, nowhere in the Qur'an the role of the woman in the sperm has been mentioned, which was an old misconception that the child was considered merely the semen of a man and even it has also been common in recent times. Dr. Saha concludes:

"Muhammad introduced this common error into the Qur'an and attributed it to God" (Saha, 2014: pp. 16-21).

#### 2-2-7. The answer to the suspicion of the creation of human from the semen of man regardless of the role of woman

The fact that Dr. Saha states that the Qur'an does not mention the role of women in the formation of sperm shows her ignorance. There are two verses that refer to the direct role of women in the formation of sperm:

**A)** The first verse: God says in Surah Al-Insān: "Lo! We create man from a drop of thickened fluid to test him; so We make him hearing, knowing."<sup>2</sup> (Insān: 2)

Authentic Shiite and Sunni interpretations and dictionaries have taken Amshāj to mean the mixing of male and female water.

**B)** The second verse: In verse 223 of Surah Baqarah, God refers to the role of women in the formation of sperm, "Your women are a tilth for you (to cultivate) so go to your tilth as ye will, and send (good deeds) before you for your souls, and fear Allah, and know that ye will (one day) meet Him. Give glad tidings to believers, (O Muhammad)."<sup>3</sup> (Makarem Shirazi, 1994, vol. 2, p. 20 -22).

A woman is her husband's farm and this analogy means that a woman is the place where her child is raised (Rāghib Isfahāni, 2007: pp. 260-275). Lisān al-Arab has adopted the same meaning (Alavi Sarashaki, 2015: pp. 28-29).

Both parents are involved in the formation of the egg cell, but the role and influence of the female is greater;

<sup>1</sup> «خُلِقَ مِنْ مَاءٍ دَافِقٍ». <sup>2</sup> «إِنَّا خَلَقْنَا الْإِنْسَانَ مِنْ نُطْفَةٍ أَمْشَاجٍ نَبْتَلِيهِ فَجَعَلْنَاهُ سَمِيعًا بَصِيرًا».

<sup>3</sup> «زَسَاوُكُمْ حَرْثٌ لَكُمْ فَاتُوا حَرْثَكُمْ أَنَّى شِئْتُمْ وَاقْدِمُوا لَأَنْفِ سِكِّمْ وَاتَّقُوا اللَّهَ وَاعْلَمُوا أَنَّكُمْ مَلَاقُوهُ وَبَشِّرِ الْمُؤْمِنِينَ».



because after sexual intercourse and sperm formation, the role of the man ends and it is the mother who plays a key role in the development of the child. Therefore, the role of the mother in the development of the fetus is much more important than the father. Since the egg cell inherits all the spiritual and moral characteristics of the parents to the child, the religion of Islam emphasizes purity and physical and moral health of both (parents) (Sahib, 1414 AH: pp. 259-270).

Thus, the verse explicitly emphasizes the irreplaceable role of women in the creation and formation of the baby sperm. Some Islamic scholars have also pointed out the dimensions and details; the female sperm is separated from the ovary about five days after menstruation and enters the fallopian tube, where it survives for about five to six days. If sexual intercourse takes place during this period, one of the male sperm cells (sperm) enters the female sperm (ovule) and begins to grow (Qurayshi, 1992: pp. 6-8).

In addition to raising doubts about the role of women in the formation of the sperm, some critics also criticize the use of the word "farm" for women, why women are likened to the farm. This is a kind of humiliation of women in Islam. It should be said that this is not humiliation, but there is a narrow point in this analogy; the Qur'an wants to point out the role of women in procreation and preservation of human life (Makarem Shirazi, 1994, vol. 2: pp. 20-22).

This verse not only does not insult women, but also emphasizes her importance and high status, and is a warning to people like Dr. Saha who looks at women as a toy or a means of play. Woman is not a means of quenching the lust and passion of men, but she is an independent being next to men, and by placing these two types, men and women together, life becomes meaningful and neither of them is superior to the other in the multiplication of the human race and the continuation of the life chain.

### 2-3. The creation of man from 'Alaq or Alaqah

The stage of creation is the second stage of embryonic development and the development of organs and 'Alaqah (i.e. clot) is the first stage of creation and includes the events of the third and fourth weeks. The word "'Alaq and alaqah" is used six times and in different ways in five verses. According to the Qur'an, the stage of 'Alaqah is very important in the creation of man; therefore, in other verses related to the creation of man, 'Alaqah is also mentioned:

"Createth man from a clot"<sup>1</sup> (Alaq: 2)

"We have created you from dust, then from a drop of seed, then from a clot, then from a little lump of flesh shapely and shapeless"<sup>2</sup> (Hajj: 5)

"Then fashioned We the drop a clot, then fashioned We the clot a little lump, then fashioned We the little lump bones, then clothed the bones with flesh"<sup>3</sup> (Mu'minūn: 14)

١. «خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ».  
٢. «فَإِنَّا خَلَقْنَاكُمْ مِنْ تُرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُضْغَةٍ مُخَلَّقَةٍ...».

٣. «ثُمَّ خَلَقْنَا النَّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظَامًا».

“He it is Who created you from dust”<sup>1</sup> (Ghāfir: 67)

“Then he became a clot; then (Allah) shaped and fashioned.”<sup>2</sup> (Qīyāmat: 38)

It is important to note that in the first verses that were revealed to the Prophet (PBUH), the subject of human creation has been raised out of ‘alaqah. “‘Alaqah” is the plural of ‘Alaq and from the article “‘Alaq” meaning to create dependence and belonging something to something else (Ibn Fāris, 2020, vol. 4: p. 125; Ibn Manzūr, 1414, vol. 10: p. 262; Jawharī, 1407, vol. 4: p. 1529).

‘Alaqah has the following meanings from the lexical and interpretive dimension:

**1-** A blood clot (Ṭurayhī, 1996, vol. 5: p. 216; Ṭantāwī, 1971, vol. 6: p. 4; Tabataba’i, 1417, vol. 14: p. 344; Makarem, 1995, vol. 14: pp. 18 and 207; Kamkar et al., 2010: pp. 139-159).

God Almighty says in verse 2 of Surah Al-‘Alaq: “God created man from the clot of (cells) of blood (Biazar Shirazi, 2008: pp. 76-77). The blood clot is the first condition that semen acquires in the uterus. Forty hours after fertilization, the egg cell is divided to four cells, and approximately three days later, after successive division, they form a 16-cell morula. The blood clot is the same as morula (like berries). (Sadler, 2010: p. 50).

**2-** Concentrated blood (Mustafawī, 1420 AH, vol. 8: p. 202). On the 21st day, i.e. three days before the end of the period of ‘alaqah, the blood system is created and the primary heart begins to function, and on the 22nd day, the fetus sucks food from the mother's blood through the chorion (Najib, nd: p. 282; Biazar Shirazi, 2008: p. 79.) At the end

of the third week, embryonic blood begins to circulate slowly in the capillaries (Morkit, 2005: p. 110).

**3-** Black worm that sticks to the throat (leech). (Farāhīdī, 1410 AH, vol. 1: p. 161; Ibn Manzūr, 1414 AD, vol. 10: p. 267). ‘alaqah is similar to a leech, both in appearance and the curvature of the column, as well as in adhering to the wall of the uterus and feeding on the mother's blood. Surprisingly, leeches are the most beautiful and accurate simile for a 23-24 day old fetus. In the seventh century AD, when the microscope or lens had not yet been invented, humans certainly did not know that the human fetus is like a leech at some point in life (Shahabian, 2005: p. 160).

**4-** Hanging, attaching (Rāghib Isfahani, 1412 AH, vol. 1: p. 579; Ibn Manzūr, 1414 AH, vol. 10: pp. 261-267) and the pendant (Farāhīdī, 1410 AH, vol. 2: p. 1296). Hanging something to something else, such as getting caught in a fishing net (Rāghib Isfahāni, 1953: p. 579). In Arabic, the meaning of each word is determined by its root; the translation of the word “‘alaqah” into concentrated blood is in conflict with the semantic principle of the root of the word (‘alaqah: hanging) and is therefore not lexically correct. In addition, in verse 67 of Surah Al-Ghāfir, the Holy Qur'an describes all the stages after sperm as ‘alaqah, and says: “He it is Who created you from dust, then from a drop (of seed) then from a clot, then bringeth you forth as a child” (Ghāfir: 67). At this stage of its life, the embryo hangs on the wall of the uterus with the umbilical cord (Kyrguz, nd: p. 86). The interpretation of the verse (‘Alaq meaning blood clot hanging in the

<sup>1</sup>. «هُوَ الَّذِي خَلَقَكُمْ مِنْ تُرَابٍ...».

<sup>2</sup>. «ثُمَّ كَانَ عَلَقَةً فَخَلَقَ فَسَوَّى».

uterus) is appropriate to the context of the verses (Rezayee Isfahani, 1999, vol. 2: p. 516). "The zygote flows into the uterine cavity after fertilization in the fallopian tube to be placed in the uterus. This hanging has been mentioned five times in the Qur'an. 'Alaq means what is hung, which is a perfect answer to the fact that is fixed today," says Maurice Bucaille. "(Bucaille, 1993: p. 273).

**5-** Wheel tools to which it is connected (bucket and rope of the well) (Ibn Manzūr, 1408 AH: p. 360; Qarashī, 1987: vol. 6: p. 31; Rāghib Isfahani, 1412 AH: vol. 1: p. 579). The fetus, while in a liquid environment and surrounded by three dark curtains, is like a baby in the womb, hanging from the umbilical cord in the uterus. Therefore, the Qur'an, with this analogy, has best expressed how the embryo is placed in the womb (Biazar Shirazi, 2008: p. 85).

**6-** Rupture: After Morula enters the uterus in the third or fourth days after fertilization, cavities gradually appear and blastocysts are formed. The internal cell mass (embryoblast) that is formed during compaction eventually turns into a real embryo (Sadler, 2010: p. 53). The blastocyst penetrates deeper into the endometrium, and a fibrin clot blocks the penetration (gap) in the superficial epithelium. As a result of merging this cavity together, large pools are formed (Sadler, 2010: p. 56).

**7-** The mud that sticks to the hand (Tūsī, 1409 AH, vol. 10: p. 379). 'alaqah is coagulated blood that adheres to anything due to moisture and nests in it. Dr. Hamed Ahmad knows the stage of 'alaqah on the eighth day, which attaches to the wall of the uterus, and Ayatollah Ma'refat also accepts the same meaning of 'alaqah and explains that 'alaqah attaches to the wall of the

uterus on the seventh day. Al-Bar says: "Basically, 'alaqah refers to anything that sticks and hangs to everything.... embryo does the same; because it clings to the wall of the womb and chooses a nest in it" (Al-Bar, nd: pp. 203-204).

**8-** An expensive and exquisite thing to which its owner belongs and does not keep it away from him, love and friendship (Qarashī, 1987, vol. 10: p. 261). 'Alaqah from the article 'Alaq on the weight of "Shafaq" basically means interest and connection to something. Therefore, 'Alaq, which is one of the stages of fetal development in the mother's womb, is called 'Alaqah (Makarem Shirazi, 2007, vol. 2: p. 75).

### **2-3-1. The difference between 'Alaq and 'Alaqah**

The article "'Alaq" has been mentioned once without "ah" out of the five times ('Alaq: 2). and it has been used four times with "ah" (Ghāfir: 67; Hājj: 5; Qiyāmah: 38; Mu'minūn: 14). In most interpretations, 'Alaqah has been defined as blood clot (Tabataba'i, 1417, vol. 14: p. 344; Makarem, 1995, vol. 18: p. 207). But the "'Alaq" here is the mud of man, which also has a sticky state; obviously, the God who created this strange creature from that sticky piece of mud deserves all the praise. "'Alaq" is sometimes considered to mean the owner of interest, which refers to the social spirit of human beings, and their interest in each other is in fact the main basis of human development and progress of civilizations (Makarem Shirazi, 1995, 27: p. 157). The commentators have considered the difference of the first verse in the word "'Alaq" because "Insān" is the name of the genus and implies the plural name. (Zamakhsharī, 1407 AH, 4: p. 776).

#### 2-4. The creation of man from Muḍghah

The word "Muḍghah" has been mentioned three times in the Qur'an and it has been mentioned in two verses: "Then fashioned We the drop a clot, then fashioned We the clot a little lump, then fashioned We the little lump bones, then clothed the bones with flesh" (Mu'minūn: 14) and "We have created you from dust, then from a drop of seed, then from a clot, then from a little lump of flesh shapely and shapeless." (Hajj: 5) Muḍghah is derived from Maḍgh (chewing) and means a piece of meat, chewing once and chewed a piece of meat and so on (Sadeghi, 1986, vol. 17 and 18: p. 189; Ibn Manẓūr, 1414, vol. 8: p. 451). This word means chewed food and chewed meat (Rāghib Isfahāni, 1426 AH: p. 467; Muṣṭafawī, 1992, vol. 11: pp. 124-125). This stage is after the implantation stage and before bone growth in the fetus (Bucaille, 1993: p. 275).

The Qur'an, after the stage of 'Alaqah, speaks from the Muḍghah; that is, a flesh-like lump that has become firm and chewed like meat. After it is completely replaced in the fetal attachment stage, the stage of lump begins. This stage begins in the third week and continues until the third month of pregnancy (Sadler, 2006: p. 92).

From the middle of the third week, the stage of reproductive layer differentiation and deformation and the movement of their cells begins and each of these layers is responsible for the formation of one of the organs or limbs of the body (Sadler, 2006, pp. 96, 102 and 111). From the beginning of the fourth week, the very simple heart of this embryo begins to function. In fact, the human heart is the first organ in the

body to begin work (Sadler, 2010: pp. 56-69).

By the end of the fourth week, there is no difference in the organs of the body. At this stage, the fetus is called an indistinguishable non-creature lump, then the fetus enters a very sensitive stage. The stage of differentiation of the reproductive layers ends almost at the end of the second month of pregnancy. At this time the fetus will weigh 55 grams and this stage can be called the created (shaped) lump. In the embryo, parts appear called somatic, from which a large part of the skeletal and muscular skeleton of the body will be formed (Morkit, 2005: p. 130).

At the end of the twentieth century, embryology discovered that the flesh, hearing, vision, and sexual organs are formed from the third week of pregnancy and are completed by the sixth month (Vi Sadler, 2006: p. 121) and this is an example of the words of the Holy Prophet (PBUH) who said:

«إذا مر بالنطفة اثنتان و أربعون ليلة بعث الله إليها ملكة

فصورها و خلق سمعها و بصرها و جلدها و لحمها و عظامها»

From the fifth week to the beginning of the ninth week, the components of the embryo begin to form, so that the visual shape of the fetus at the end of the eighth week resembles a human (Shakerin, 2014: p. 143). It seems that due to the complex and intertwined changes seen in the masterpiece of God's creation, in each member the state of lump is different from the other member. Also, in another verse, the adjective creature and non-creature is mentioned for the lump of flesh: "We have created you from dust, then from a drop of seed, then from a clot, then from a little lump of flesh shapely and shapeless" (Hajj: 5) which may mean shaped and unshaped, and refers to the stages of continuous development of the embryo and fetus at

the stage of component development, some of which are formed and some of which are being formed.

In any case, the growth of the elementary components develops by the end of the sixteenth week, that is, about four months. In the Qur'an, God has introduced each of these layers as responsible for forming one of the organs or systems of the body (Rezayee Isfahani, 2002, vol. 2: p. 496). These interpretations of the Qur'an fully correspond to what we know today about some stages of fetal development, and have nothing to do with what new science can criticize.

#### **2-4-1. Differences in the words "fā'" and "thumma"**

In verse 14 of Surah Al-Mu'minūn, the stages of creation are turned to each other with "fā'", but in verses: (Hajj: 5; Ghāfir: 67; Qiyāmah: 37 and 38) the mentioned stages are attributed with "thumma". According to the sciences of Arabic literature, "fā'" and "thumma" are both used for Atf, but the difference between them is that the letter "fā'" means three things: sequence, pursuit and causation. But "thumma" in addition to the order indicates the deadline and time interval, but the meaning of causation is not considered in it (Ibn Hishām, 2002, vol. 1: pp. 93-95 and 139). Despite "thumma" in the sum of these cases, it can be said that in Surah Al-Mu'minūn, time interval is also a condition, but the Creator is not in a position to express this matter in this noble verse and it is mentioned in the following verses and the cause in "fā'" is transmitted to the next verses. Because "Nuṭfah" is the introduction and cause of "ʿAlaqah" and...

It is also stated in the verses of Surah Al-Mu'minūn that "thumma" indicates the order of creation. Because the creation of ʿAlaqah from Nuṭfah is much more amazing than the creation of Nuṭfah, and "thumma" (i.e. then) indicates a longer time delay. As stated, the conversion of the stage of Nuṭfah to ʿAlaqah is temporally clear. Because of the fluid, a blood clot forms that is very different in both color and properties. The placement of "fā'" between the two stages of ʿAlaqah and Muḍghah is due to the fact that the transition from the stage of ʿAlaqah to the stage of Muḍghah is similar to the pursuit of one object from another; because flesh and blood are both solid, and this evolution is closer to the mind and intellect than the conversion of Nuṭfah to ʿAlaqah, although there is a long time interval in it (Ibn Ashur, nd, vol. 18: p. 20).

In fact, it can be said that the noble verses of Surah Al-Mu'minūn seek to compare the conversion of Nuṭfah to ʿAlaqah in relation to the later stages in terms of being surprising and far from the mind, which is not considered by the Creator in other verses.

#### **2-5. Formation of bones and flesh**

The Holy Qur'an says about these two stages of the creation of human embryos: "Then fashioned We the drop a clot, then fashioned We the clot a little lump, then fashioned We the little lump bones, then clothed the bones with flesh" (Mu'minūn: 14)

The Holy Qur'an refers to this stage after stating the stage of Muḍghah (chewed meat). This stage, which begins in the late sixth week of pregnancy, turns the Muḍghah into bones, and with the formation of bones, the fetus gradually takes on a human form and

becomes bone cells. God refers to this stage as follows: فَخَلَقْنَا الْمُضْغَةَ عِظْمًا

In fact, the flesh that later covers the bones and forms a large part of the human body is different from the flesh that existed before the bones were created, and this is one of the wonders of this heavenly book that reveals this fact. "Flesh" is the last stage of embryonic development and fundamental changes in the physical completion of the body structure. Bare bones are covered with flesh, nerves, large and small vessels, and to protect the flesh of the body, a beautiful skin is stretched as clothing on its limbs.

God says: فَكَسَوْنَا الْعِظَامَ لَحْمًا. It is said that in the verse "كَسَوْنَا" is used which is only to express clothing; but God has used this for the flesh that covers us. Perhaps it is due to the protective role of the body's fleshy tissues, which, like the protective layer, protects the bones from injuries and blows to the body that lead to their breaking. Also, like clothes, it protects the body from heat and cold (Makarem Shirazi, 1995, vol. 14: p. 212). Ayatollah Ma'refat, explaining the formation of bones and muscles, considers this stage in the fifth to seventh week after sperm coagulation (Ma'refat, 2007, vol. 6: p. 84). At this stage, moderation, completion and adjustment of the fetal body parts and elimination of their defects and its formulation is done (Rezayee Isfahani, 2002, vol. 2: p. 500).

The Holy Qur'an says: فَخَلَقْنَا الْمُضْغَةَ عِظْمًا. It is interesting that the Qur'an says before this sentence in the same verse: «ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَكِينٍ». The interpretation "Ja'ala" (i.e. put) has been used, but here the interpretation has changed and the word "khalaqa" (i.e. created) has been used. The word "khalaqa" does not mean creation, but

creation with a special quality (Mustafawī, 1981, vol. 3: p. 109). From a medical point of view, it is said that after the fetus has passed the stage of 'Alaqah and Mudghah, some of its cells become bone cells.

After that, it gradually covers the muscles and flesh on it; thus, this verse is a scientific miracle that unveils this issue, which was not clear to anyone at that time, and the knowledge of embryology is clearly a confirmation of the valuable teachings of the Qur'an; because the Qur'an does not say: We turned the Mudghah into bone and flesh, but it says: We turned the Mudghah into bone and covered the bones with flesh (Collection of Articles, Qur'an and Medicine (3), 2009, vol. 2: p. 552).

## 2-6. Breathing the soul or blowing the divine spirit

It is clear from the verses of the Qur'an that after the stage of purification and regulation of the organs of the human body in the womb, there is another stage called "inflating the soul"; that is, a great and honorable spirit is blown in man, the truth of which is not known to us (Iskandarloo et al., 2016: p. 87).

In total, inflating the soul in the verses of the Holy Qur'an has been used in five cases (Al-Hijr: 28-29; pp. 71-72; Anbiyā': 91; Tahrim: 12; Sajdah: 7-9) Breathing is the last stage of fetal development from the point of view of the Holy Qur'an. The human soul is a wonderful, transcendent and abstract truth and has a reality other than the body. In verses 12 to 14 of Surah Al-Mu'minun, we come to the conclusion that God's purpose for a different creation in this verse is the inflating of the soul in the human fetus, and this stage of human development is not the same as other stages of human material

and physical creation and is a higher stage that leads to its life and changes the interpretation of creation to composition and has said: «تَمَّ أَنْشَأَانَاهُ خَلْقًا آخَرَ». Although he could have said: «تَمَّ خَلْقْنَا...». And this is because it indicates that what we have created is a truth other than what was in the previous stages (Tabataba'i, 1417, vol. 15: p. 25).

Thus, it becomes clear that the bloating of the soul is not like natural interactions, but something else and another creation, and this proves that the soul is not of the type of material beings (Mişbāh, 1999, pp. 358-359).

Thus, by blowing the soul, the fetus enters a new stage; because after this he is able to move and listen, and here is the beginning of coordination and cooperation between members. It is after this stage that God praises His creation and calls Himself the best of creators. Therefore, what is meant by the spirit that is breathed into man is a living and well-being being that is a creation of God. Scientifically, the most important thing that happens to the fetus after the trimester is the movement and activity of the heart and the rapid growth of the fetus and the formation of external organs.

In the third and early fourth months, due to the nervousness of the limbs, the fetus begins to move, the fetal heartbeat is fully heard, and above that, scientists have realized that the fetus is able to hear in late pregnancy and first hears the mother's heartbeat. In the fifth month, the pregnant woman feels the movement of the fetus completely. After stating the stages of the creation of the fetus, the Qur'an has also referred to this stage

(Mu'minūn: 14) (Diab, 2004: pp. 89-92 with summary).

### 3. Differences in fetal development stage

One of the most important differences is the difference between the verses in expressing the steps. In Surah Al-Mu'minūn, verses 12 to 14, it describes all the stages of creation (sperm, clot, lump, bones and flesh). But in Surah Ḥajj, verse 5, it is stated only up to the stage of lump. In verses 37 and 38 of Surah Al-Qiyāmah, it is stated only up to the stage of clot, and in Surahs ('Alaq: 2; Yāsīn: 77; Insān: 2; 'Abas: 19; Kahf: 37; Fāṭir: 11; Najm: 26) it is stated up to the stage of clot.

The reason for this difference is that in Surah Al-Mu'minūn, God Almighty has been in the position of explaining the stages of creation of the human fetus; for this reason, He has described all these steps in detail. But in other verses it is only a reference to his original creation for the punishment and expression of His greatness, how He created such an excellent creature from small matter.

### 4. Semen coming out of the spine and ribs

Another doubt has been expressed from the verse: "So let man consider from what he is created. He is created from a gushing fluid. That issued from between the loins and ribs."<sup>1</sup> (Tāriq: 5-7)

This verse says that semen comes out of the spine and ribs, while this view contradicts the science of embryology. "Today, it is clear that semen is made in the testicles and stored in the seminal

<sup>1</sup> «فَلْيَنْظُرِ الْإِنْسَانُ مِمَّ خُلِقَ \* خُلِقَ مِنْ مَّاءٍ دَافِقٍ \* يَخْرُجُ مِنْ بَيْنِ الصُّلْبِ وَالتَّرَائِبِ».

vesicle and comes out of the urethra, and the place where it is made and the way it comes out have nothing to do with the spine or chest," says Dr. Suha. Therefore, this statement of the Qur'an is a gross mistake. (Saha, 2012: p. 52). It goes on to say that this mistake is rooted in ancient superstitions. Muhammad has made a slang mistake in the Qur'an, poor god who does not know where semen is made and flows (Khalili Chalbani, 2020: p. 2).

The words "sulb" and "Tarā'ib" used in this verse are from a valid dictionary meaning: something that is hard and strong is called sulb (Farāhīdī, nd, vol. 7: p. 127). Sahib al-Muḥīṭ Fī al-Lughah has equated the word "sulb" with "zahr" (Sahib ibn 'Ibad, nd, vol. 8: p. 148). However, some lexicographers have considered sulb not as the whole body but as a part of the vertebrae of the spine (Shaybānī, 1975 AD, vol. 3: p. 46; Ibn Sayyidah, nd, vol. 6: p. 379; Azharī, 1421 AH, vol. 3: p. 1007; nd, vol. 1: p. 124; Zubaydī, 1414 AH, vol. 2: p. 148; Mustafawī, 1963, vol. 9: p. 118).

#### 4-1. The semantics of "Tarā'ib"

"Tarā'ib" is the same as the breast bones or what is between the clavicle bones and the breasts or the four ribs on the right and four ribs on the left side of the chest (Firouzabadi, nd, vol. 1: p. 52). The verse of sulb and tarā'ib is one of the similar verses in which the commentators have offered different views, which we will examine:

##### 4-1-1. The first view: assigning sulb and tarā'ib to a man

Ayatollah Makarem Shirazi has written in Tafsīr Nemooneh: In these verses, only the sperm of a man is mentioned, because the interpretation of "mā' dāfiq" (jumping water) is true about the sperm

of a man and not a woman, and it is the same as the pronoun in "comes out" in the next verse returns to it. (Makarem Shirazi, 1995: pp. 20-22). The late Taleghani has written in the interpretation of the verse: "mā' dāfiq", which is specific to men, comes out of sulb and tarā'ib (Taleghani, vol. 3, p. 233). "Sulb" means the back of the man and "Tarā'ib" means between the two femurs and is an allusion to the male genitalia. Therefore, this verse is consistent with the opinions of embryologists (Abbasnejad, 2006: p. 532; Rezayee Isfahani, 2002: p. 443).

**Review:** A: One of the meanings of "mā' dāfiq" in semantics is "moving substance" and it can be the characteristics of the Nuṭfah of both men and women. Therefore, there is no good reason that sulb and tarā'ib are for a man. B: The verse in question refers to the place of departure of the fetus and the forms that are included in other translations can also be included in this translation.

##### 4-1-2. The second view: assigning "sulb" to a man and "tarā'ib" to a woman

According to this view, the commentators believe that what comes out of sulb is the "mā' dāfiq"; but sulb belongs to men and tarā'ib to women (Ṭabarī, 1412 AH, vol. 30: p. 92; Ṭabrisī, 1993, vol. 10: p. 750; Qurṭubī, vol. 20: p. 50; Ibn Kathīr, 1419 AH, vol. 8: p. 368; Mughniyeh, 1424 AH, vol. 1: p. 802).

**Review:** The drawbacks of the previous view can be included here, and this claim is baseless. Their only reason is that because the child is born from the mixture of male and female sperm, they have assigned "sulb" to the man and "tarā'ib" to the woman.



#### **4-1-3. Third view: "mā' dāfiq" refers to the penis of the fetus**

Marāghī, in his commentary on the following verse, has quoted a precise and scientific justification from some physicians; according to him, the most hidden thing is that the "sperm" is taken from the testicles of a man and the ovaries of a woman, and embryological studies show that they are located near the kidneys. Then, with the passage of time and growth, these two gradually come down from that place (Marāghī, nd, vol. 30: p. 113). This verse does not refer to the outflow of water, but refers to its outflow during the formation of the fetus. Some medical scholars such as Muhammad al-Bar have accepted this view in their book (Al-Bar, 1415 AH: p. 114).

**Review:** The most important drawback to this view is that the "mā' dāfiq" comes out of the testicles and ovaries of an adult, not the fetus that has not yet been born. That is, before birth, when the fetus is in the womb, there is not yet enough water produced; that is, the formation of sperm does not begin at the time of the fetus and not even at the time of birth, but the time of its onset is only in the stage of puberty and egg development in the female ovaries begins at the time of puberty (Asmi Ghibbashi, 2018: pp. 198-200).

#### **4-1-4. Fourth view: The Exodus of the Fetus from "sulb and tarā'ib"**

Contrary to the views of other commentators, Ma'mūn Shafaqa has offered an interpretation that what comes out of sulb is the fetus itself and not the mā' dāfiq. According to him, mā' dāfiq does not leave the area that is between the sulb and tarā'ib (Shafaqa, 1407 AH: pp. 84-282). (Boroumand,

2009: pp. 43-56). These differences arise from not paying attention to the context of the verses and establishing a connection between the verses of this surah. The verse is in the position of explaining the departure of the fetus from the womb and God wants to bring his attention to the final return and exit from the grave and enter the scene of resurrection (Boroumand, 2009: p. 50).

#### **4-1-5. The fifth view: sulb and tarā'ib are irony of the whole body**

In other words, the "mā' dāfiq" comes out of the whole human body, so this is ironic. The justification is that the tarā'ib includes the heart and liver, and the sulb also includes the spinal cord and, through it, the brain, which are the organs that play a role in the formation of fluid (Ālūsī, 1415 AH, vol. 15: p. 309). (Majlisī, 1403 AH, vol. 57: p. 331). It is noteworthy that Dr. Saha made a mistake in his statements and was not careful enough. He writes: "Today it is clear that semen is made in the testicles and stored in the semen sac ... So this statement of the Qur'an is a gross mistake" (Saha, 2014: pp. 16-20).

With a little attention, it becomes clear that the verse does not refer to the place where semen was made, but to the place where it came out; it should be noted that in these verses of Surah Tariq, only the sperm of a man is mentioned, because "mā' dāfiq" refers to the sperm of a man and not a woman, and the pronoun in "comes out" in verse 7 of Surah Tariq: "It comes out of sulb and tarā'ib" returns to it and says: "This jumping water comes out of the backbones and ribs" (Makarem Shirazi, 1995: pp. 20-22).

Carefully in these verses, which miraculously deal with the subject of

sulb and tarā'ib in an age when there was no knowledge of autopsy, so the weakness of the skeptics is revealed. There may be other important truths in these verses that are not revealed to mankind today and will be revealed by future discoveries.

### **5. Doubt about the timing of fetal sex determination**

Another issue of the Qur'an that Suha has doubted is the importance of determining the sex of man in terms of masculinity and femininity, which is mentioned in verses of Surah Al-Qiyāmah: "Was he not a drop of fluid which gushed forth? Then he became a clot; then (Allah) shaped and fashioned. And made of him a pair, the male and female." (Qiyāmah: 37-39)

After mentioning the verses and bringing the desired meaning, Suha quotes the hadith of the Prophet (PBUH) from Ṣahīh Muslim, who says: "The sperm is placed in the womb for forty nights, then it sends an angel towards it. The angel asks: O God, should it be a man or a woman? Then God makes him a man or a woman. According to Dr. Saha, it is a gross mistake to raise the issue that the male and female of the fetus are determined after the mating stage; because the sex of the fetus is known as soon as the egg cell is formed and the combination of sperm and egg in the first few hours after sexual intercourse (Saha, 2014, pp. 16-20).

Rejecting the suspicion of the time of determining the sex of the fetus Unfortunately, Dr. Saha has contented herself with a hadith that has been seriously criticized by Shiite and Sunni narrators, and this narration has been used as a tool. While she has questioned many narrations. In response to this view, Imam Ṣādiq (AS) has quoted a

hadith from the Prophet (PBUH), saying: "O people, whatever has come to you from me that agrees with the Qur'an, they are my words and whatever comes to you and opposes the Qur'an are not my words"(Sobhani, 1963: p. 25).

According to this authentic hadith and dozens of similar hadiths, since the narration narrated by Dr. Saha is in conflict with the explicit text of the Qur'an, it is not valid and that the meaning of the verse is not to determine the sex in the stage of clot; rather, it refers to the appearance of sexual effects and symptoms that appear at this stage. This verse pursues lofty goals, some of which are mentioned:

A-Human guidance: (Rezayee Isfahani, 2011: pp. 22-29). B- Referring to the resurrection: Makarem Shirazi, 1994, vol. 2: pp. 20-22). C- Gender diversity and balance: (Makarem Shirazi, 1994, vol. 2: pp. 20-22). D- The secret of the Qur'an: (Khalili Chalbani, 2020: p. 6).

### **CONCLUSION**

The Holy Qur'an divides the stages of fetal growth and development with a clear and simple expression and with a unique style. When we examine the verses of creation in general, the amazing miracle of this heavenly book is revealed; because each of the stages of human creation has been scientifically revealed and proven to everyone.

What is important in these verses is that the Qur'an refers to the stages of fetal development in order to pay attention to the power of God, when medical scientific instruments did not have the power to show these stages, and the Qur'an, without going into details, like the book of guidance, reminds man of these amazing facts.

In the verses of the Qur'an, the creation of man has been considered from two perspectives: one is the material dimension and the other is the spiritual dimension.

The material dimension considers the source of human creation as soil or mud, and the spiritual dimension states that God, after completing the material creation, creates another creation in man, which is the blowing of the divine spirit. The doubts raised are solely due to the fundamental differences between Suha as a materialist who opposed to the religion and denies God, Islam, Qur'an and the monotheistic school. Otherwise, none of the doubts have any scientific basis, and it is merely a contradiction that is against the Qur'an, the prophet (PBUH) and all divine religions. Also, the difference in expressing the stages of creation is different because of God's purpose. In some cases, mentioning the steps is intended and in some verses it only refers to the origin of human creation.

For example, the word "Mahīn" means "weak" in the verse: «سَلَالَهُ مِنْ مَاءٍ» meaning a summary of weak fluid and corresponds to what is said in embryology about the characteristics of male sperm and female egg. "Mā' dāfiq" means moving water and refers to the sperm of both men and women. The term "mingled sperm" refers to the role of both male and female sperm in fetal formation. The verse: «يُخْرِجُ مِنَ الصُّلْبِ وَ التَّرَائِبِ» refers to the stage of human birth, not to the exit of semen from the spine and ribs and is an allusion to the whole human body and is in harmony with embryology and refers to the common role of men and women in human formation. The difference between

'Alaq with "ah" and without "ah" indicates the plural form of Insān. The difference between the letters "Fā'" and "Thumma" refers to the amazing creation of clot from sperm, and....

Therefore, the result of this study is the confirmation of embryological knowledge on the valuable Qur'anic teachings in the study of human creation and between the achievements of modern medical sciences and embryological verses, there is no conceptual incompatibility. So as science progresses, new interpretations of the scientific truths referred to in the Qur'an will be emerged, and perhaps in the future, after obtaining accurate tools, more truths can be obtained and commentators be able to better understand the verses differently by getting more help from scientific findings.

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