## Letter to Editor of International Journal of Cardiology

The Editor
International Journal of Cardiology
ELSEVIER

Subject: Opinion on "The heart and cardiovascular system in the Qur'an and Hadith"

Dear Sir,

Though late, I am horrified to see the article entitled "The heart and cardiovascular system in the Qur'an and Hadith" by a group of authors- Marios Loukas et al on line published in your journal recently.

I am a medical physicist by profession now engaged in teaching and research in the department of medical physics and biomedical engineering in a private university in Dhaka, Bangladesh. My first reaction is this: it is neither a research article nor a good review article on the subject. The authors have willfully tried to mislead the readers using a catchy title with the intention of preaching the greatness of the holy book even as a book of biological science dealing with human system to impress upon the western readers having little or no knowledge of Islam in general and on Qur'an in particular.

I have studied important holy books of all major religions including the Qur'an since my boyhood when I was exposed to Qur'anic study at class eight in our Arabic class and continued for 2-years. I still read, whenever I need, the holy Qur'an and other religious scriptures as I find them quite interesting from the sociological point of view.

Let me clearly state, Mr. Editor, that I have no prejudice against Islam or for that matter against any other religion(s) including animism. Any individual has the basic right to hold and practice any religion of his likings, but that does not mean those people have the right to intermingle their religion with science as we understand today.

## What is Qur'an?

The Qur'an, as I understand is devoutly a religious book prescribing as if it is a complete code of life for its followers. The author of the holy book never meant or attempted to show that it were a book on science or of other specialized discipline like history, economics, geography, anthropology etc. The Qur'an was meant, and still is meant for common mass with average intelligence to follow it so that they can achieve the jannat after—the worldly life. That is why it covers, like many other religious books, many aspects of day to day life including the creation of the universe and the earth, rudimentary information on health and hygiene, birth of children, marriage, and inheritance etc. on the basis of the knowledge available to the Qur'anic authors at that time. The Qur'an is full of 'Dos and not Dos' for its followers and boring repetition of things again again including the stories of Musa, Jesus, Ibrahim, Daud and Solomon and

Pharaohs of Egypt etc. It treats those don't have faith in Qur'an as kafirs (non believers) and prescribed for them severe punishment afterworld. The Qur'an shows very poor knowledge of world history and geography- its limit is within Semitic Asia. The greatness of Egyptian, Chinese, Greek and Indian civilization is poorly reflected, although its followers in the later period (9<sup>th</sup>-11<sup>th</sup> century AD), especially the intelligentsia of the Arab world profusely used the store house of knowledge of these countries to create new world of knowledge in the Islamic world.

Although I would not call the article as 'voodoo science', nor even a 'pseudo science', but surely not call it a research scientific paper by modern standard set out by scientific journal. In a scientific journal, neither place of miracle nor words of God or goddesses find place as authoritative source or reference. This reminds me a story about Napoleon and Lapalce, while the later after finishing his treatise on dynamics, presented it to Napoleon, Emperor of France. Napoleon asked the author, "I find no place of God" in your treatise. The Scientist-Philosopher had the polite answer, "I felt no need of Him". The tradition setout by the Philosopher – Scientist is jealously guarded by the scientific community and the scientific literature. Sir, you broke the time honoured tradition and practice by publishing this crafty worded 'research paper' (sic). The authors lost all the credibility when they said, "The entire Qua'ran is believed to be the direct word of God according to Muslims, revealed to the Prophet Muhammad .. .. etc ." Further more, the sentences like "Found within the Qur'an and Hadeeth are accurate (sic) descriptions of anatomical structures, surgical procedures, physiological characteristics, and medical remedies"; Therefore it is evident that the authors of the texts had a good understanding (sic) of both the etiology and pathology of many diseases of the heart and the cardiovascular system."; " ..... God created disease and God also created a treatment for every disease. "; or " .. .. Muhammad has been reported to have said that for every disease there is a remedy, and when the remedy is made apparent, the disease is cured by the permission of God "; and many sentences like these make the article all the more unscientific, irrational, and biased to a particular scripture of a particular religious followers. In this connection may I pose the following set of questions?

- 1. Do the authors really think honestly that the so called accurate descriptions & functioning of the heart and cardiovascular system and other biological organic functions given in the holy book are perfect, all embracing without scope of further improvement?
- 2. If the answer is affirmative, then we should stop all researches in biological and medical science, and engage ourselves in the study of the holy Qur'an and the Hadis, close down all modern hospitals, clinics, medical colleges and universities. We then should approach the *Islamic Mullahs*, well versed in Qur'an, Hadiths and Islamic theologies, and *Hekims*, Physicians of the Islamic tradition, for cure of heart alignment, bypass surgeries, angioplasties and placement of pacemakers etc, because we will find perfect 'surgical procedures' and holy cardio-medicinal prescriptions in the holy book as the authors claimed.
- 3. If the answer is negative, the description is imperfect, defective containing lacuna of knowledge, and there is a scope for further research and studies outside the Qur'anic periphery & discipline, then the words of the Qur'an becomes imperfect

- & faulty, and turns out to be not coming from the all knowing, almighty Allah as He is the knower of every thing, therefore He can not deliver imperfect-incomplete things in the holy book.
- 4. Then the laborious, diligent, painful and patient works of, especially in biological and medicinal sciences, Galen (2<sup>nd</sup> century AD), Ibne Sina (980-1037), Leonardo de Vinci (1452-1519), Andreas Vesalius (1514-1564), Michael Serviettes (1511-53), Heroines Farcies (1537-1619), William Harvey (1578-1657) and many other pioneer researchers of 19<sup>th</sup> and 20<sup>th</sup> centuries become redundant as everything perfect knowledge in these fields are available in holy pages of the great book, we lovingly call 'words of the almighty Allah'. Now question arises should we refer our students to the Holy Qur'an instead of the works of these great scientists.
- 5. For embryological advance knowledge should we refer our students of embryology to ambiguous, self contradictory and confusing verses of the Qur'an rather than great works of Galen (2<sup>nd</sup> century AD), Streeter (1941) and O'Rahily (1972) because some westerners like Maurice Bukaily and Keith L. Moore (embryologist) profusely praised for pseudo scientific contents of the Qur'an obviously for some motivated reasons.

In the entire Qur'an, I gave a through search, no specific mention of circulating blood, venous-artery system carrying the blood stream into heart or flowing out of the heart and heart as a non-stopping pumping machine are to be found. Reference to blood is to be found in a scattered way in some places in connection of women's menstruation (Sura Bakara 2:222), slaughtering of animals (Sura Anam 6:145)- but in no where composition of blood or its circulatory system is indicated, though we don not expect such things from a 7<sup>th</sup> century religious book.

As regards reference of heart in the Qur'an, like the ancients heart is thought of as seat of human emotion, mind, aesthetic sense like beauty-love-affection-kindnesssoftness, cruelty, sickness, hardness. These conceptions attributed to heart are not simply true; these characters of human being are being controlled by the brain. But this was not known to the author of the Qur'an. In literary sense till today heart is classified in two categories (i) Heart as a seat of human emotion and (ii) Hearst as an organ, a vital element in the cardiovascular system. We often say 'she has a heart full of love', 'Simmer, the killer of Imam Husain had a stone heart' - all these expressions have nothing to do with heart as a pumping machine. But when we say, 'he is suffering from angina pain' we mean pain in the organ heart but the Qur'an has made confusion of these two aspects of heart. Many a times, the Qur'an has said the kafirs have the 'covered heart' or 'sealed heart' (2:7, 2:88 etc.), whereas the Muttaqis have open or soft heart easily accessible to message of God (8:63). Many a times Qur'an has talked about men of sick hearts, hearts as hard as rock etc – these type of hearts are possessed by the kafirs and or hypocrites – but again the Qur'an failing to distinguish between organic heart and emotional heart.. The Qur'an also says that the kafirs, possessing such hearts wrap their hearts to keep their hearts isolated from the message of the Our'an. Referring to rocklike hard heart, the holy book says for example in verse 2:74 of Sura Bakara, "... Thenceforth were your hearts hardened: they became like a rock and even worse .. ". Regarding sick heart out of many Suras, we quote one from Sura Bakara (2:10), "In their (non believers) hearts is a disease; And Allah has increased their disease and grievous is the chastisement they (incur)) because they lied (to themselves)." The men with sick heart are like kafirs, who are bound to suffer in hell with burning fire again and again. No where in the Qur'an it is to be found heart referring as organ responsible for circulation of blood throughout the body. This fact was not known to the scientific world not to speak of the holy Qur'an until the great work of Galen in second century AD.

## Development of fetus in the womb

Science seekers in the holy Qur'an, whether Ulemas or trained in modern science boast that description of the development of human seeds in the womb since its conception is most authentic and at per with the modern science of embryology.

But unfortunately the Qur'anic author had no idea of female eggs (ovum) or ovary, the female reproductive organ, and fertilization of eggs with male sperm what is termed as conception. Some points out that the verse 75:2 (Sura Dahr or Insan) which states -

"Verily We created Man from a drop of mingled sperm, ..." <sup>1</sup> indicates the fertilization of ovum with the sperm. This is however not true – this explanation is a modern interpolation and it is farfetched. Since the Qur'an had no idea of fertilization of ovum with soerm, the old interpretation had been that the meaning of the verse is that a man is created from a mixture of two fluids each ejecting from male genital organ and that of female at the time of sexual union (sic). But this is a wrong notion, held by the classical interpreters of the holy book including the great Bengali translator of Qur'an, Bhai Girish Chandra Ghosh, who translated the verse as "Certainly We created man from a mixture of sperm. (of man and woman)". Opposed to it, yet another interpretation was offered by many including Bukaily according to which the verse indicates about the composition of the men's fluid (sperm). According to them the fluid under reference is not a simple homogeneous fluid but composed of many elements, though those elements are neither known to the author of the holy book nor to Bukaily. Supporting this view a well known Bengali translator translated this verse as: "We created man out of composite fluid sperm." <sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> Mingled: The female ovum has to be fertilized with male sperm before a new animal can be born. (The Holy Quar-an: English Translation of the meanings and Commentary. Revised and Edited by The Presidency of Islamic Researches, IFTA, King Fahd Holy Qur-an Printing Complex, Saudi Arabia)

<sup>&</sup>lt;sup>2</sup> The Bengali translation says, "নিশ্চয় আমি মনুষ্যকে মিশ্রিত (স্ত্রী-পরুষের) শুক্রযোগে সৃষ্টি করিয়াছি .... ", Quoran Sharif, First translation of the Quoran in Bengali (1887), Reprint, Koshroj Kitab Mahal, 15 Banglabazar, Dhaka, Bangladesh.

<sup>&</sup>lt;sup>3</sup> Al Quranul Karim: Bengali translation. Siddiqia Foundation, Manikganj, Bangladesh. In Bengali the relevant verse reads, " আমি মানুষকে সংমিশ্রিত শুক্র দ্বারা সৃষিট করিয়াছি।"

Treating the male sperm as despicable or despised fluid (32: 8 and 77: 20) Qur'an wrongly said that it emanates from the backbone and ribs – wrong idea propagated by the Greek physician Hippocrates long before Muhammad, was repeated by the author of the holy Book. This indicates the all powerful all knowing Qur'anic God, as he boasted through the Qur'an is simply not true. There are several instances where the Almighty in Qur'an had made mistakes. The elaborate stage of development of the drop of the sperm in the womb as quoted in Qur'an is wrongly interpolated insertion by the modern translators. In many verses this has been repeated in the Qur'an. We just quote one from one such modern translation from the Sura Al-Mumin (40:67):

"It is He Who has created man from  $\underline{dust}$ , then from a sperm-drop, then from a leech-like clot; Then does He get out as a child; then lets you reach your age of full strength; then lets you become old- ...."  $^4$ 

In here the holy book or its translator equipped with modern knowledge of development of fetus and embryo in the womb, supported by pathetic, deceptive and misleading interpretation of Maurice Bucaille and Keith Moore on Qur'anic embryology tried to mislead us by imposing a new interpretation of the verses.

Firstly, the holy book many a times, said that man (the first man Adam?) is made from clay/ sounding clay/ quintessence of clay (6:2, 15:26, 23:12, 38:71, 55:14), earth (20:55, 71:17), dust (22:5, 30:20, 35:11, 40:67,), water (24:45). All these are confusing commentaries on the part of a holy book. From scientific point one does understand how a man could be created from clay / dust/ earth - does Allah acts like a potter? What is the meaning of quintessence of clay? or quintessence of sperm? The God of Our'an hinted that in making man from clay He used dry clay that makes sound as used in pottery. The 'leech like clot' is a modern interpolation, all older interpretation takes it to be the "clot of condensed blood". The Arabic word alaq means some thing suspended, floating or attached. It is difficult to correlate creation of man on the one hand from clay or dust at the same time it evolves in the womb from a drop of male fluid (sperm). Has God tired of making Adam from the clay. It sounds very funny when all animals including two legged animals have an evolutionary lineage, why human being had to be created from the clay or dust? It is no problem for Allah to create men and their progeny from clay as He boastfully said in Qur'an, "Allah creates what He wills; for verily Allah has power over all things".(24:45). Such boastful utterances have been made by Allah throughout the Our'an, when He says as for example, "For to anything which We have willed, We but say "Be". And it is" (16:40). Such is the powerful Allah of the Qur'an. When we read the verse "Among His signs is this that He created you from dust; and then, behold ye are men scattered (far and wide), question arises had Allah created one Adam or many many Adams from the clay?

<sup>4</sup> The Holy Quar-an: English Translation of the meanings and Commentary. Revised and Edited by The Presidency of Islamic Researches, IFTA, King Fahd Holy Qur-an Printing Complex,

Saudi Arabia

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We have cited many examples to show that the holy Book is not at all a scientific, and whatever elements of science it tried to record is full of confusion and erroneous. The main danger of the article that it might open flood gate to see soon sciences in Vedas, Sciences in Zend Avesta and Science in holy Bible. Finally Keith L. Moore once exponent of Qur'anic science has said in his recent book that the embryology in the Qur'an is a repetition of Greek and Indian medicine. <sup>5</sup> Another thing I must point out that in referring to the holy book he never (willfully ?) quoted the verses, instead he referred to some translation of the holy book.

Yours truly,

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<sup>&</sup>lt;sup>5</sup> The developing human: Clinically oriented Embryology – Keith L. Moore and TVN Persaud, 7<sup>th</sup> Edition.