

Modern Medicine Confirms that the Heart has a Brain that thinks and reasons, as mentioned in the Glorious Holy Quran fifteen centuries ago.

Anti-Islamic Allegations:

The Quran mentions the word “heart” and its synonyms in numerous verses, exceeding a hundred times and approaching one hundred and forty times. Allah Almighty has stated that the heart is the seat of contemplation, reflection, faith, disbelief, and rationality. However, the enemies of Islam, especially atheists, insist that the heart is merely a muscle for pumping blood and falsely claim that the Glorious Quran has committed a scientific error.

The Muslim Response:

Initially, in response to the false allegations made by the Islamophobes, we will begin by citing some of the verses of the Holy Quran and the honorable prophetic hadiths that mention the heart as contributing to understanding, perception, and judgment on matters.

This will be followed by “The Heart, Mind and Spirit Medical and Psychiatric is a Research Paper By: Professor Mohamed Omar Salem- Royal College of Psychiatrists, United Kingdom of Great Britain.” With numerous Western medical and scientific references at the end of this medical research paper by non-Muslim Western physicians specializing in cardiology, mental health, and psychiatry.

Thinking Begins in the Heart

Examples from the Glorious Holy Quran:

Hearts are the main source of reasoning. Here, rationality has been associated with it, since no organ works if the heart doesn't.

Allah Exalted He Says in the Glorious Holy Quran:

“Have they not travelled throughout the land so their hearts may reason, and their ears may listen? Indeed, it is not the eyes that are blind, but it is the hearts in the chests that grow blind.” [Quran \(22:46\)](#)

And

Allah Exalted He Says in the Glorious Holy Quran:

” You see those with sickness in their hearts racing for their guardianship, saying ‘in justification’, “We fear a turn of fortune will strike us.” But perhaps Allah will bring about ‘your’ victory or another favour by His command, and they will regret what they have hidden in their hearts.”

[Quran \(5:52\)](#)

And

Almost everywhere, feelings precede thinking. What you feel is what you say usually. It all starts from the root, out until the fruit. Is it really think before you speak, or rather feel before you do?

Allah Exalted He Says in the Glorious Holy Quran:

“The Day when neither wealth nor children will be of any benefit. Only those who come before Allah with a pure heart ‘will be saved’.” [Quran \(26:88-89\)](#)

And

You have a damaged heart and it makes a lot of difference. So don’t take this half-heartedly!

Allah Exalted He Says in the Glorious Holy Quran:

“Do they not then reflect on the Quran? Or are there locks upon their hearts?? [Quran \(24:47\)](#)

And

This implies that one can’t reflect if one’s heart is locked. Perhaps we should try to think with an open heart instead of an open mind, because if the heart is open eventually the mind will open, too, because thinking sprouts from the heart.

Allah Exalted He Says in the Glorious Holy Quran:

“And hold firmly together to the rope of Allah¹ and do not be divided. Remember Allah’s favour upon you when you were enemies, then He united your hearts, so you—by His grace—became brothers. And you were at the brink of a fiery pit and He saved you from it. This is how Allah makes His revelations clear to you, so that you may be ‘rightly’ guided.” [Quran \(3:103\)](#)

Great minds think alike? How about this: Great hearts bond alike.

Example: From the Noble Prophetic Hadith:

Allah Exalted He said”

“I have prepared for My righteous slaves (such excellent things) as no eye has ever seen, nor an ear has ever heard nor a human heart can ever think of” [Sahih al-Bukhari 7498](#)

The heart is also the source of imagination:

It was narrated from Abu Hurairah that the:

Messenger of Allah (ﷺ) said : “Allah has forgiven my nation for the evil suggestions of their hearts, so long as they do not act upon it or speak of it, and for what they are forced to do.”

[Sunan Ibn Majah 2044](#)

The false dichotomy of head versus heart cannot be resolved by the mind gaining dominance over the emotions, but rather by increasing the balance between the two systems.

Abu Huraira reported Allah’s Messenger (ﷺ) as saying:

“Verily Allah does not look to your faces and your wealth but He looks to your heart and to your deeds.” [Sahih Muslim 2564c](#)

You can’t have a sweet fruit with a bitter root:

Narrated Abu Hurairah:

“I came to the Prophet (ﷺ) and spread out my garment next to him, then he took it and gathered it at my heart, so I did not forget after that [any Hadith].” [Jami` at-Tirmidhi 3834](#)

Modern Medical and Scientific Evidence:

The Heart has Brain [Quran \(22:46\)](#) a very short video:

The heart senses emotional information five to seven seconds before it happens, while the brain senses it three to five seconds beforehand. So not only are emotions important contributors to our output of thoughts, but also they may be one of the best ways to influence and create a change in what and how we think.

In 1974, the French [researchers](#) Gahery and Vigier, stimulated the vagus nerve (which carries signals from the heart to the brain) in cats and found that the heart and nervous system were not simply following the brain's directions.

In 1983, the heart was reclassified as an endocrine gland when a new hormone called atrial natriuretic factor (ANF), which affects blood vessels, kidneys, adrenal glands and regulatory regions in the brain, was found to be being produced by the heart.

Dr. J. Andrew Armour discovered the heart also contains a cell type known as intrinsic cardiac adrenergic (ICA), which synthesizes and releases neurotransmitters once thought to be produced only by neurons in the brain and nerve ganglia.

The heart starts beating in an unborn fetus before the brain has been formed, a process scientists call "[autorhythmic](#)."

Dr. Armour introduced the concept of a functional "[heart brain](#)" in 1991. Considered an independent entity, the heart's brain is composed of an elaborate network of neurons, support cells and neurotransmitters which enables it to process information, learn, remember, and produce feelings of the heart and then transmit this information from one cell to another.

"We observed the heart was acting as though it had a mind of its own and was profoundly affecting perception, intelligence, and awareness," explained McCraty.

According to Goleman, it's a person's EQ ([Emotional Quotient](#)) that enables them to succeed in life as much or more than their IQ ([Intelligence Quotient](#)).

During the '60s and '70s pioneer physiologists John and Beatrice Lacey conducted research that showed that the heart actually communicates with the brain in ways that greatly affect how we perceive and react to the world around us.

Neurologist Antonio Damasio stresses the rationality of emotion in his book *Descartes' Error*, where he emphasizes the importance of emotions in decision-making. He points out that patients with brain damage in the areas of the brain that integrate the emotional and cognitive systems can no longer effectively function in the day-to-day world, even though their mental abilities are perfectly normal.

Found in The Heart by Modern Science:

The Quran says that our hearts can think. Skeptics claim that whoever wrote the Quran made a mistake, only brain cells can think. Today scientists discovered brain cells in the heart.

In the field of neurocardiology, science has discovered that the heart possesses its own intrinsic networking system. A network of BRAIN cells with over 40,000 neurons! This gives the heart the ability to independently send and process information. Even make decisions and demonstrate a type of learning and memory. This means you can think with your heart!

[Conscious Nourishment, Wow. You Can LITERALLY Think With Your Heart, 2014.](#)

The brain has around 86 billion neurons while the heart has only 40 thousand neurons. This means that the brain has 2 million times more neurons than the heart; but scientists just discovered that signals sent from the heart to the brain are much more than those sent from the brain to the heart.

The heart is in a constant two-way dialogue with the brain. But, McCraty explains, the heart and cardiovascular system are sending far more signals to the brain than the brain is sending to the heart...

Recent work in the relatively new field of neurocardiology has firmly established that the heart is a sensory organ and an information encoding and processing center, with an extensive intrinsic nervous system that's sufficiently sophisticated to qualify as a heart brain. Its circuitry enables it to learn, remember, and make functional decisions independent of the cranial brain.

To everyone's surprise, the findings have demonstrated that the heart's intrinsic nervous system is a complex, self-organized system; its neuroplasticity, or ability to reorganize itself by forming new neural connections over both the short and long term, has been well demonstrated.

[Noetic Systems, Thinking From The Heart – Heart Brain Science, 2022](#)

The heart has brain cells. This was known recently, however this was portrayed in the Quran 1400 years before it was discovered.

[Quran \(22:46\):](#)

“Have they not travelled throughout the land so their hearts may reason, and their ears may listen? Indeed, it is not the eyes that are blind, but it is the hearts in the chests that grow blind.”

أَفَلَمْ يَسِيرُوا فِي الْأَرْضِ فَتَكُونُ لَهُمْ قُلُوبٌ يَعْقِلُونَ بِهَا أَوْ آذَانٌ يَسْمَعُونَ بِهَا فَإِنَّهَا لَا تَعْمَى الْأَبْصَارُ وَلَكِنْ تَعْمَى ۖ
الْقُلُوبُ الَّتِي فِي الصُّدُورِ

“Kuloob قلوب” means hearts. In this verse their hearts can think. Today we know that the heart has brain cells and exchanges signals with the brain.

How could a man who did not read or write “Prophet Muhammed peace be upon him who lived 1445 years ago have known about Heart and brain cells?

The Heart has brain Cells [Quran \(24:46\)](#)– A very short video:

The Heart, Mind and Spirit Medical and Psychiatric is a Research Paper By: [Professor Mohamed Omar Salem](#)– Royal College of Psychiatrists, United Kingdom of Great Britain. With numerous Western medical and scientific references at the end of this medical research paper by non-Muslim Western physicians specializing in cardiology, mental health, and psychiatry.

Introduction

The concept of mind is of central importance for psychiatrists and psychologists. However, little attention has been paid in most formal textbooks to this important issue, which is usually studied under the section of ‘Philosophical aspects of psychiatry/psychology’. The practicing psychiatrist should have some working model of the mind to help him understanding his patient’s problems (Salem, 2004).

This review discusses some aspects of the components of mind, which is only one step on a long road. In many cultures throughout history, the heart has been considered the source of emotions, passion and wisdom. Also, people used to feel that they experienced the feeling or sensation of love and other emotional states in the area of the heart.

However, in the past, scientists emphasized the role of the brain in the head as being responsible for such experiences. Interestingly, recent studies have explored physiological mechanisms by which the heart communicates with the brain, thereby influencing information processing, perceptions, emotions and health.

These studies provided the scientific basis to explain how and why the heart affects mental clarity, creativity and emotional balance. In this review, I shall try to summarize and integrate the interesting findings in this area.

Heart and emotions

It is long known that changes in emotions are accompanied by predictable changes in the heart rate, blood pressure, respiration and digestion. So, when we are aroused, the sympathetic division of the autonomic nervous system energizes us for fight or flight, and in more quiet times, the parasympathetic component cools us down.

In this view, it was assumed that the autonomic nervous system and the physiological responses moved in concert with the brain's response to a given stimulus (Rein, Atkinson, et al, 1995).

The heart and brain

However, following several years of research, it was observed that, the heart communicates with the brain in ways that significantly affect how we perceive and react to the world. It was found that, the heart seemed to have its own peculiar logic that frequently diverged from the direction of the autonomic nervous system.

The heart appeared to be sending meaningful messages to the brain that it not only understood, but also obeyed (Lacey and Lacey, 1978). Later, neurophysiologists discovered a neural pathway and mechanism whereby input from the heart to the brain could inhibit or facilitate the brain's electrical activity (McCraty, 2002)

The brain in the heart:

After extensive research, Armour (1994) introduced the concept of functional 'heart brain'. His work revealed that the heart has a complex intrinsic nervous system that is sufficiently sophisticated to qualify as a 'little brain' in its own right. The heart's brain is an intricate network of several types of neurons, neurotransmitters, proteins and support cells similar to those found in the brain proper.

Its elaborate circuitry enables it to act independently of the cranial brain – to learn, remember, and even feel and sense. The heart's nervous system contains around 40,000 neurons, called sensory neurites (Armour, 1991).

Information from the heart – including feeling sensations – is sent to the brain through several afferents. These afferent nerve pathways enter the brain at the area of the medulla, and cascade up into the higher centres of the brain, where they may influence perception, decision making and other cognitive processes (Armour, 2004). Thus, it was revealed that the heart has

its own intrinsic nervous system that operates and processes information independently of the brain or nervous system.

This is what allows a heart transplant to work. Normally, the heart communicates with the brain via nerve fibres running through the vagus nerve and the spinal column. In a heart transplant, these nerve connections do not reconnect for an extended period of time; in the meantime, the transplanted heart is able to function in its new host only through the capacity of its intact, intrinsic nervous system (Murphy, et al, 2000)

The heart's magnetic field:

Research has also revealed that the heart communicates information to the brain and throughout the body via electromagnetic field interactions. The heart generates the body's most powerful and most extensive rhythmic electromagnetic field. The heart's magnetic component is about 500 times stronger than the brain's magnetic field and can be detected several feet away from the body. It was proposed that, this heart field acts as a carrier wave for information that provides a global synchronizing signal for the entire body (McCraty, Bradley & Tomasino, 2004)

Heart field interactions between individuals

There is now evidence that a subtle yet influential electromagnetic or 'energetic' communication system operates just below our conscious awareness. Energetic interactions possibly contribute to the 'magnetic' attractions or repulsions that occur between individuals, and also affect social relationships. It was also found that one person's brain waves can synchronize to another person's heart (McCraty, 2004).

Communication via hormones: the heart as a hormonal gland

Another component of the heart-brain communication system was provided by researchers studying the hormonal system. The heart was reclassified as an endocrine gland when, in 1983, a hormone produced and released by the heart called atrial natriuretic factor (ANF) was isolated. This hormone exerts its effect on the blood vessels, on the kidneys, the adrenal glands, and on a large number of regulatory regions in the brain.

It was also found that the heart contains a cell type known as 'intrinsic cardiac adrenergic' (ICA) cells. These cells release noradrenaline and dopamine neurotransmitters, once thought to be produced only by neurons in the CNS. More recently, it was discovered that the heart also secretes oxytocin, commonly referred to as the 'love' or bonding hormone.

In addition to its functions in childbirth and lactation, recent evidence indicates that this hormone is also involved in cognition, tolerance, adaptation, complex sexual and maternal behaviours, learning social cues and the establishment of enduring pair bonds. Concentrations of oxytocin in the heart were found to be as high as those found in the brain (Cantin & Genest, 1986).

Increasing psychophysiological coherence

Data indicate that when heart rhythm patterns are coherent, the neural information sent to the brain facilitates cortical function. This effect is often experienced as heightened mental clarity, improved decision making and increased creativity. Additionally, coherent input from the heart tends to facilitate the experience of positive feeling states.

This may explain why most people associate love and other positive feelings with the heart and why many people actually feel or sense these emotions in the area of the heart. So, the heart seems to be intimately involved in the generation of psychophysiological coherence (Tille et al, 1996, & McCraty, 2000).

The heart and amygdala

Research has shown that the heart's afferent neurological signals directly affect activity in the amygdala and associated nuclei, an important emotional processing centre in the brain. The amygdala is the key brain centre that coordinates behavioural, immunological, and neuroendocrine responses to environmental threats.

It compares incoming emotional signals with stored emotional memories, and accordingly makes instantaneous decisions about the level of perceived threat. Due to its extensive connections to the limbic system, it is able to take over the neural pathways, activating the autonomic nervous system and emotional response before the higher brain centres receive the sensory information (Rein, McCraty and Atkinson, 1995 & McCraty et al, 1995).

The heart and intuition

A very interesting research finding has been that the heart is involved in the processing and decoding of intuitive information (McCraty, Atkinson & Bradley, 2004). Previous data suggests that the heart's field was directly involved in intuitive perception, through its coupling to an energetic information field outside the bounds of space and time (Childre & McCraty, 2001).

Using a rigorous experimental design; there was evidence that both the heart and brain receive and respond to information about a future event before the event actually happens. Even more surprising was that the heart appeared to receive this intuitive information before the brain (McCraty, Atkinson & Bradley, 2004).

Discussion

It has long been thought that conscious awareness originates in the brain alone. Recent scientific studies suggest that consciousness emerges from the brain and body acting together (Popper & Eccles, 2000). As has been shown, a growing body of evidence now suggests that the heart plays a particularly significant role in this process.

The above findings indicate that, the heart is far more than a simple pump. In fact, it is seen now as a highly complex, selforganizing information processing centre with its own functional 'brain' that communicates with, and influences, the cranial brain via the nervous system, hormonal system and other pathways.

The involvement of the heart with intuitive functions is another interesting piece of information. However, as persons with transplanted hearts can function normally, the heart can be considered here as a medium or tool, for an underlying more sophisticated integrating system that has the capacity to carry the personal identity of the individual.

These new visions might give better understanding to the concept of mind as a multi-component unit that is not only interacting with the physical environment through demonstrable means, but also has the capacity to communicate with the cosmic universe through non-physical pathways (Lorimer, 2001).

This gives rise to the concept of the spirit as the non-physical element, or the field, of the mind that can communicate with the cosmos outside the constraints of space and time. The evidence for such communication comes from the reported phenomena of extrasensory perception (telepathy, precognition, and clairvoyance), psycho-kinesis, psychic healing and religious experiences (Radin, 1997 & Henry, 2005).

Possibly further advancement in quantum physics may one day give us further insight into how we can formulate this new model of the heart, mind and spirit.

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Allah Knows Best.