

The Soul: Why Medical Practitioners and Islamic Scholars Do Not Accept Brain Death Concept*

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Abstract

The concept of brain death refers to the irreversible loss of brain function which includes the brain stem. The diagnosis of brain death is a controversial issue among Muslim scholars and medical experts

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because it involves the pronouncement of death of a patient whose heart is still beating with the assistance of a ventilator (breathing apparatus). Many countries recognise brain death as true death. However, there are religious scholars and medical experts who disagree with the concept of brain death because they believe that the soul still exists in one's body although the brain has been diagnosed as dead. From their point of view, the heartbeat shows that the soul is still present in the body. From the perspective of Islam, a person is considered dead when there is separation between the soul and body. This paper will discuss the arguments pertaining to the soul which have been used in rejecting the concept and diagnosis of brain death.

Keywords

Brain death, cardiac death, death, soul, medical practitioner, ventilator.

Introduction

The determination of death is highly important because it is related to the civil law and religious consequences that follow the pronouncement of death.¹ The Quran does not explain in detail the signs of death, but Muslim scholars have described them. Before the emergence of modern technology, there were very few problems in identifying death, and we normally agree that death occurs when breathing and heartbeat ceased, and the soul abandoned the body.² However, with the advancement of medical knowledge, the two vital functions of breathing and heartbeat are assisted by machines and drugs. New knowledge in the area of medicine, therefore, necessitates a relook at the traditional definition and understanding of life and death.³

1. Abul Fadl Mohsin Ebrahim, "Islamic Jurisprudence and the End of Human Life," *Medicine and Law* 17 (1998): 189–96.
2. Calixto Machado, "Diagnosis of Brain Death," *Neurology International* 2 (2010): 2.
3. "Consensus Statement on Brain Death" (Ministry of Health: Academy of Medicine of Malaysia, Malaysian Society of Neuroscience, 2003).

The nature of knowledge is that a large part of it progresses and advances. This is equally true on the issue of the definition and understanding of life and death. At the beginning of the emergence of the concept of brain death, many discussions and debates in academia were conducted from the perspectives of ethics, philosophy and religion.⁴ The subject is considered a controversy because it involves death which must be handled delicately. For Muslims, the concept of brain death poses a challenge to the epistemological, metaphysical, ethico-legal and theological understandings and principles of the inherited Islamic intellectual tradition which has several pragmatic implications for practising Muslims. It must be noted that the Islamic intellectual tradition inherited from yesteryears is based on the knowledge of the day. It is imperative therefore that scholars respond accordingly to the advancements made in other fields of knowledge such as medicine. This does not mean that what has been held all this while must be rejected. Rather, scholars must look at ways to harmonise traditional understanding with that of contemporary findings. This is especially so in the case of confirmation of death as it is critical for Muslims to carry out the obligations that arise upon the determination of death, such as funeral prayers, distribution of inheritance, and a required waiting period prior to remarriage by the widow of the deceased man.⁵

The question that arises is whether patients who suffer brain death are, in fact, dead. With regard to this issue, there are two schools of thought: one which accepts the concept of brain death while the other which rejects the concept, and each of them has their own arguments. This article will focus on the opinions of medical practitioners and Islamic scholars

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4. Mughis Sheerani et al., "Brain Death: Concepts and Knowledge amongst Health Professionals in Province of Sindh, Pakistan," *Journal of the Pakistan Medical Association* 58 (2008): 352–56.
 5. Aasim I. Padela, Ahsan Arozullah and Ebrahim Moosa, "Brain Death in Islamic Ethico-Legal Deliberation: Challenges for Applied Islamic Bioethics," *Bioethics* 27, no. 3 (2013): 132–39.

who reject the concept of brain death with a special focus on arguments involving the soul.

Meaning of Death

Death is a gateway between two lives, the life of this world and that of the hereafter.⁶ From the physiological perspective, death is defined by looking at two bodily functions, namely cardiovascular and respiratory functions. A person is confirmed dead when both of the functions have permanently ceased.⁷ For Muslims, death is the separation of the soul (*al-rūh*) from the body and cessation of the signs of life.⁸ Even though the exact time when the soul separates from the body cannot be precisely determined, as neither the Quran nor the Hadith makes any mention on it, the signs of death are still evident.

Muslim jurists have always given explanations on the signs which signify the approaching of death. The Shāfi'ī school of Islamic Jurisprudence (*Madhhāb al-Shāfi'ī*) explains that death is imminent when the feet droops horizontally, the nose droops, too, arms are loose and facial skin becomes flabby.⁹

From the medical perspective, the process of identification of death becomes more challenging with technological advancement that brings about new innovations such as the invention of the mechanical ventilator¹⁰ and artificial heart. A

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6. Yousef Boobes and Nada Al Daker, "What It Means to Die in Islam and Modern Medicine," *Saudi Journal of Kidney Diseases and Transplantation* 7, no. 2 (1996): 121–27.
 7. James L. Bernat, Charles M. Culver and Bernard Gert, "On the Definition and Criterion of Death," *Annals of Internal Medicine* 94, no. 3 (1981): 389–94.
 8. Ahmet Bedir and Sahin Aksoy, "Brain Death Revisited: It Is Not 'Complete Death' according to Islamic Sources," *Journal of Medical Ethics* 37, no. 5 (2011): 290–94.
 9. Shams al-Dīn Muhammad bin Muhammad al-Khatīb al-Shirbinī, *Mughnī Al-Muhtāj ilā Ma'rifah Ma'ani Alfāz Al-Minhāj*, ed. by Muhammad Muḥammad Tamir and Sharif 'Abdullah (Cairo: Dar al-Hadith, 2006).
 10. C. Machado, "Diagnosis of Brain Death," 2.

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mechanical ventilator helps the organs of the person diagnosed with brain death to be perfused with blood and the particular organ is suitable for transplantation.¹¹

Meaning of the Soul

The question pertaining to the nature of the soul is one of the polemics in the past scientific and intellectual tradition of Islam. Muslim scholars such as Abū ‘Alī al-Husayn bin ‘Abd Allah ibn Sinā, Abū Hamid Muḥammad bin Muḥammad al-Ghazālī and Abū ‘Abd Allah Muḥammad bin ‘Umar bin Husayn al-Rāzī understood the soul as involving related meanings:

Firstly, the soul’s attachment to a body. In this regard, the definitions given by the three scholars are nearly similar, that is, the soul is the first perfection of a natural body (*jism tabi‘ī*) possessing organs and being capable of living (*kamāl awwal li jism tabi‘ī alī dhī ḥayāt bi al-quwwah*).¹² In defining the soul, al-Rāzī also explained that *al-nafs* is not the form of a body but rather is the first perfection to a body which has organs and is capable of living.¹³

Secondly, the function of the soul differs from that of the body. The soul is an essentially non-material substance (*jawhar muḥayyir lahā mufāriq ‘anhā bi al-dhāt*).¹⁴ It relates to a body in regard to the management and implementation (*al-tadbīr wa al-tasarruf*) in which the soul acts as a manager and implementer, while the

11. Abul Fadl, “Islamic Jurisprudence,” 189–96.

12. Abu ‘Alī al-Husayn bin ‘Abd Allah ibn Sina, *Aḥwal al-Nafs Risālah fī al-Nafs wa Baqa’ihā wa Ma’adihā wa yalīhā Thalāth Rasā’il fī al-Nafs li Ibn Sinā* (Paris: Dar Babylon, 1952), 56; Fakhr al-Dīn al-Rāzī, *Kitāb al-Mabāhith al-Mashriqiyah fī ‘Ilm al-Ilāhiyyat wa al-Tabi‘iyyāt* (Hyderabad: Matba‘ah Majlis Da’irah al-Ma‘arif al-Nazamiyyah, 1922), vol. 2, p. 223.

13. Al-Rāzī, *Al-Mabāhith al-Mashriqiyah*, vol. 2, p. 220; Muhammad Husayni Abu Sa‘dah, *al-Nafs wa Khulūdūhā ‘ind Fakhr al-Dīn al-Rāzī* (Cairo: Sharīkah al-Ṣafā li al-Ṭaba‘ah wa al-Tarjumah wa al-Nashr, 1989), 109.

14. Ibn Sina, *Kitāb al-Najāt*, 202–203. Also in Fakhr al-Dīn al-Rāzī, *al-Nafs wa al-Rūḥ wa Sharḥ Quwā humā*, ed. Muhammad Saghir Hasan al-Ma‘sumi (Islamabad: Ma‘had al-Abḥāth al-Islāmiyyah, 1968).

body as a tool and appliance. By analogy, al-Rāzī likens the soul to a carpenter skilled in his trade using different kinds of tools. Hence, the soul is able to perform several functions by means of such tools; it thus sees via the eyes, hears via the ears; thinks via the mind and acts via feelings. The aforementioned is what is meant by all bodily parts being tools and appliances for the soul.¹⁵

Clearly, the elaboration above shows that the aforementioned scholars' definitions of the soul relate to one another. Al-Razi's disagreement over the view that the soul is the form (*ṣūrah*) of a body, insofar as the first meaning above is intended, only strengthens the view that the soul is unique and not the same as the body. Both of the views are consistent with the Islamic creed and the immortality of the soul which Muslims testify.

In addition, insofar as the soul and body are interrelated, al-Rāzī states that the heart (*al-qalb*) is the chief for all bodily parts.¹⁶ He brings forth various *naqlī* and *ʿaqlī* arguments in his books, *Kitāb al-Nafs wa al-Rūh*, *al-Mabāḥith al-Mashriqiyyah* and *al-Maṭālib al-Āliyah*, to prove that the heart is not only the first organ created in the human body but also the last to die. His arguments provide a clear and logical chronology of the soul's interaction with the human body in which it firstly interacts with the heart and through it, with the brain and other parts of the body.¹⁷

On the other hand, al-Rāzī does not argue about death directly. However, his view gives indications that the heart is the last organ to stop functioning. This means that death occurs when the heart stops beating. Nonetheless, it is interesting to note that current medical views may contradict such a point. For instance, during a heart transplant surgery, the heart stops beating soon after it is taken out from a patient's body and later

15. Al-Razi, *al-Nafs wa al-Rūh*, 32–33.

16. Ibid. Also in Muḥammad Uṭṭman Najāṭi, *al-Dirāsāt al-Nafsāniyah ʿinda al-ʿUlamāʾ al-Muṣlīmīn* (Cairo: Dar al-Shuruq, 1993), 246.

17. Al-Rāzī, *al-Mabāḥith al-Mashriqiyyah*, 409.

replaced with a new heart. As a result, the patient keeps on living with the new heart.

Indeed, many of the issues surrounding the soul are beyond the mind's capability to truly comprehend on its own. Fortunately, both al-Qur'ān and al-Hadīth do provide some answers. Thus, the best definition for death is as mentioned in the Qur'ān, verse 42 of *Surah al-Zumar*, i.e. death occurs when the soul departs from the body.¹⁸

What is Brain Death?

The concept of brain death was first introduced in the United States in 1968 by the Harvard Medical School to study the definition of brain death.¹⁹ The Malaysian Medical Council defines brain death as an irreversible loss of brain functions including that of the brain stem which conclusively recognises a person as dead.²⁰ Death due to trauma inflicted on the skull could be caused by anything from traffic accidents,²¹ to brain tumour, brain anoxia,²² high blood pressure and viral infections.

In Malaysia, the main factor that causes brain death is traffic accident²³ which is similar to other countries such as Saudi Arabia.²⁴ Only patients with acute cerebral lesions under

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18. Muhammad Sayyid Ahmad al-Musayyar, *al-Rūh fī Dīwāsāt al-Mutakallimīn wa al-Falāsifah*, 3rd. ed. (Cairo: Dar al-Ma'arif, 2002).
 19. "A Definition of Irreversible Coma, Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death," *JAMA* (1968).
 20. Zaki Morad Mohamed Zaher, "Guideline Of The Malaysia Medical Council (MMC Guideline 006/2006) (Kuala Lumpur: Malaysian Medical Council, 2006). <http://mmc.gov.my/images/contents/ethics/Organ-Transplantation.pdf>. (accessed on 6 February 2017)
 21. A. Bedir and S. Aksoy, "Brain Death Revisited," 290–94.
 22. F. A. M. Shaheen et al., "Brain Death and Organ Donation in Saudi Arabia," *Transplantation Proceedings* 1345, no. 1 (2001): 2629–31.
 23. Lela Yasmin Mansor and Hooi Lan Seong, *Sixth Report of the National Transplant Registry* (Kuala Lumpur: n. pub., 2010).
 24. F. A. M. Shaheen et al., "Brain Death," 2629–31.

ventilation and intensive treatment may lead to brain death.²⁵ Brain death is an artifact of technology. Without machines to sustain the respiratory and cardiac functions of severely brain-injured individuals, “brain death” would not exist as a diagnostic category. Rather, individuals who are currently diagnosed with brain death would die of cardiopulmonary failure.²⁶

Brain death is declared when any three of the following factors are absent namely motor responses, brainstem reflexes, and respiratory drive in a normothermic, non-drugged comatose patient with a known irreversible massive brain lesion and no contributing metabolic derangements.²⁷ Not all medical practitioners can diagnose and certify brain death. It can only be done by specialist medical practitioners with experience in the diagnosis, preferably among anaesthesiologists, physicians, neurologist and neurosurgeons.²⁸ In Malaysia, the concept of brain death was first practised in the 1970’s. The first kidney surgery was done in Hospital Kuala Lumpur in June 1976 with the use of organs from brain-dead patients.²⁹ Since then, the concept of brain death has been widely accepted by physicians, healthcare professionals and general public.³⁰

Other Islamic countries that practice the brain death concept are Jordan, Turkey, Kuwait, Iran,³¹ Oman, Qatar,

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25. F. Procaccio et al., “Do ‘Silent’ Brain Deaths Affect Potential Organ Donation?,” *Transplantation Proceedings* 42, no. 6 (2010): 2190–91.
 26. Laura A Siminoff, Christopher Burant and Stuart J Youngner, “Death and Organ Procurement: Public Beliefs and Attitudes,” *Social Science & Medicine* 59, no. 11 (2004): 2325–34.
 27. E.F.M. Wijdicks, “Brain Death Worldwide: Accepted Fact but No Global Consensus in Diagnostic Criteria,” *Neurology* 58 (2007): 20–25.
 28. “Consensus Statement”.
 29. Mohd Rani Jusoh, “Mati Otak: Konsensus Pengamal Perubatan,” in *Sempadan Bioteknologi Menurut Perspektif Islam*, ed. Shaikh Mohd Saifuddeen (Kuala Lumpur: Institut Kefahaman Islam Malaysia (IKIM), 2005), 139–52.
 30. M. T. Spoor and F. R. Sutherland, “The Evolution of the Concept of Brain Death,” *Annals (Royal College of Physicians and Surgeons of Canada)* 28 (1995): 30–34.
 31. A.S. Daar, “The Response to the Challenge of Shortage in the Middle East Region: A Summary,” *Transplantation* 1345, no.97 (1997): 3215–16, and E.F.M. Wijdicks, “Brain Death Worldwide,” 20–25.

Saudi Arabia, Bangladesh and Indonesia. A study done by the American Academy of Neurology showed that 70 out of 80 countries practise guidelines for brain death.³² However, Egypt, Syria and Pakistan are among the countries that do not accept the brain death concept and as such, do not have guidelines and law regarding it.³³

***Fatwā* on Brain Death**

The issue of brain death has been discussed by the Council of the Islamic Fiqh Academy in the Organization of the Islamic Conference (OIC) held in Amman, Jordan in 1986 which was attended by medical doctors and Islamic scholars. The Islamic legal rules for death become applicable under the following criteria:

1. a person who suffers from cardio-respiratory arrest and attending physicians confirm that such an arrest is irreversible; and,
2. a person whose brain activity has ceased and physicians confirm that such a cessation is irreversible.³⁴

Malaysia has religious edicts (*fatwā*) on brain death issued by the states of Selangor (2000) and state of Johor (2001). The *fatwas* state that, while brain death is accepted as death, its requirements are very strict, namely:³⁵

1. Medical examination of brain death is carried out professionally.
2. Recommended to get approval from family members (spouse, child, either parent).

32. Ibid.

33. Mohd Rani Jusoh, "Mati Otak", and E.F.M. Wijdicks, "Brain Death Worldwide," 20–25.

34. Omar Sultan Haque, "Brain Death and Its Entanglements A Redefinition of Personhood for Islamic Ethics," *Journal of Religious Ethics* (2008): 13–36.

35. Shaikh Mohd Saifuddeen Shaikh Mohd Salleh et al., *Pemindahan Organ dari Perspektif Islam*, 1st. ed. (Putrajaya: Kementerian Kesihatan Malaysia dan Jabatan Kemajuan Islam Malaysia, 2011), 16–22.

3. Certification of brain death should be carried out by at least three professional doctors (priority given to Muslim doctors).
4. In the event of a medical treatment that can alter and cure brain death, then such a ruling does not apply.

The Islamic Juridical Councils that endorse brain death as death are Senior Religious Scholars Commission in Saudi Arabia, Islamic Fiqh Academy of the Organization of Islamic Conference (OIC-IFA), Majlis al-Shura al-Islami (South Africa), the United Kingdom Muslim Law Council and Indonesian Council of Ulama. However, two other juridical bodies—namely Islamic Organization for Medical Sciences (IOMS) and Council of Islamic Jurisprudence of Muslim World League—endorse brain death as unstable life.³⁶

The Religious Ruling Committee, Kuwait Ministry of Endowment, resolved in December 1981 that a person cannot be considered dead when his brain has died as long as his respiration and circulation system are functioning, even if his life continues with mechanical aid.³⁷ However, in 1985 in Kuwait, the issue of brain death was discussed widely during the seminar organised by the Islamic Organization of Medical Science (IOMS) to study the end of human life. The following are the output of the discussions:³⁸

1. The seminar realised that in the majority of cases, there is no difficulty in recognising the occurrence of death,

36. A.I. Padela et al., “Brain Death in Islamic Ethico-Legal Deliberation,” 132–39.

37. Abul Fadl Mohsin Ebrahim, “Deliberations of Muslim Scholars on the End of Human Life,” in *Organ Transplantation Contemporary Islamic Legal and Ethical Perspectives* (Kuala Lumpur: A.S Noordeen, 1998), 92–99.

38. Samir Farah and Ashraf Al-Kurdi, “Brain Death: Definition, Medical, Ethical and Islamic Jurisprudence Implications,” in *Geriatrics And End of Life Issues: Biomedical, Ethical and Islamic Horizons*, ed. Hossam E. Fadel, Muhammad A. A. Khan, and Aly A. Mishal (Amman: Jordan Society for Islamic Medical Sciences in collaboration with Federation of Islamic Medical Associations, 2006), 33–48.

- through conventional signs or as a result of external medical observation which notes the absence of the signs that distinguish the living from the dead.
2. The seminar reached the conclusion that the few cases which are usually under careful and comprehensive medical observation at hospitals, specialised medical centres, and intensive care units have particular importance because there is an urgent need to diagnose them as cases of death, although the body still shows signs, which have always been accepted as signs of life, be they naturally displayed by some organs of the body or as a result of resuscitation equipment applied to the patient.
 3. The seminar discussed the signs of death as listed by fiqh reference works and discovered that, in the absence of the Quran or Traditional text which explicitly defines death, these opinions reflect the medical knowledge available at the time of writing. Given that diagnosis and signs of death have always been a medical matter on the basis of which fiqh scholars make legal rulings, participating physicians presented the then medical view concerning the occurrence of death.
 4. Based on the presentations made by the physicians, it is clear that, the decisive factor for them in proclaiming the death of a patient is the lifelessness of the area of the brain that is responsible for vital body functions, which they express as death of the brain stem. A diagnosis of brain stem death has clear conditions which rule out certain suspicious cases, and physicians are capable of coming up with a confident diagnosis of brain stem death about which they have no doubt.
 5. Any other vital organ or function, such as the heart or respiration, may temporarily stop, but as long as the brain stem is alive, it can be revived. The lives of a number of patients have been saved this way. When, however, the brain stem itself has died, there is no hope of saving the patient, for his life has come to an end,

- even if other systems of the body continue to move or function. Undoubtedly, with the death of the brain stem, such systems are eventually going to stop and be lifeless.
6. Based on the doctors' presentation, fiqh scholars are inclined to the view that when it is ascertained that a human being has reached the stage of brain stem death, he is considered to have withdrawn from life, and certain rulings of the dead are applicable to him. As for the remaining rulings that concern the dead, the participating fiqh scholars prefer to delay until all major systems of the body come to a stop. It is hereby recommended that an additional, detailed study be made to determine which rulings for the dead apply immediately and which should be delayed.
 7. Thus, following the above, it has been agreed that when the death of the brain stem is certified by a report of a committee of medical specialists, it is lawful to remove resuscitation equipment.

Shaykh Jad al-Haqq 'Ali Jad al-Haqq, the Rector of Al-Azhar University in Cairo, Egypt, has given his opinion that it is not unethical for medical specialists to switch off the ventilator which assists breathing and heartbeat.³⁹ However, the Majlis al-Ulama in Port Elizabeth (South Africa) does not support such a concept as it believes that a person with brain death is alive and organ procurement from a brain dead individual is considered manslaughter.⁴⁰

Indeed, opinions differ among contemporary Muslim scholars regarding the issue of brain death. Those who do not accept brain death as death do so based on the view of the classical Muslim jurists. Muslim jurists (*ulamā'*) like Dr. Yusūf al-Qarāḍawī state that brain death is a legal death. Likewise,

39. Abul Fadl, "Islamic Jurisprudence," 189–96.

40. A. I. Padela et al., "Brain Death in Islamic Ethico-Legal Deliberation", 132–39.

Mujahid al-Islam Qasmi has said that once the brain stem dies, the soul leaves the body.⁴¹

Brain Death and Soul

The debate regarding the issue of brain death mostly occurs in Islamic countries because Islamic jurisprudence is a part of the civil legislation. Hence, any new issue that arises has to be discussed from the Islamic point of view. The concept of brain death is not widely accepted because the Quran does not describe in detail the definition of death.⁴² Therefore, doubts still persist in accepting such a concept. In Islam, most Muslims understand that death is the departure of the soul. However, hardly any detailed explanation is available about the signs of its departure.⁴³

Furthermore, medical practitioners and Islamic scholars reject the concept of brain death because they relate brain death to the existence of the soul in the body. Turkey and Saudi Arabia are among the countries that accept brain death. Both of the countries have laws and guidelines but a few of their religious scholars and medical experts still disagree with the concept. An article written by Bedir & Aksoy shows that the main reason why they reject the concept of brain death is because they believe that the soul is still within one's body even though the brain has been diagnosed as dead.⁴⁴ Separation of the soul from the body happens via separation of the soul from each and every tissue of the body. In Saudi Arabia, news from www.arabnews.com has reported that medical experts have called out for a new *fatwa* on brain death. Dr. Abdullah A. Abdulgader, director of the

41. Abul Fadl, "Islamic Jurisprudence," 189–96.

42. M. Al-Mousawi, T. Hamed and H. Al-Matouk, "Views of Muslim Scholars on Organ Donation and Brain Death," *Transplantation Proceedings* 29, no. 8 A (1997): 3217.

43. Ibid.

44. A. Bedir and S. Aksoy, "Brain Death Revisited," 290–94.

Prince Sultan Cardiac Center in AlHasa, said the following:⁴⁵

As long as a patient's heart is beating, there is no reason for us to take him or her off the ventilator. What we know now is that a beating heart produces energy, it produces electromagnetic waves. These waves react with the outside world. The happenings in the cosmos and the outside world has a direct bearing on the way our heart reacts. A person's spirit is in the heart and as long as it is beating, the communication is on and should not be physically terminated. We should not interfere in the ways of God. He has given life and only He will take it away.

Egypt is one of the countries which reject the concept of brain death. Many medical practitioners in Egypt assume that the soul is within the body if the body still has signs of biological life.⁴⁶ A doctor from the Department of Anesthesiology and Intensive Care Specialist, Faculty of Medicine of the Cairo University has even started a campaign to convince doctors and religious scholars to reject the brain death concept.⁴⁷ The doctor has argued that as long as the heart is still beating and the patient is still breathing, the soul still exists in the body. This condition makes them feel guilty in carrying out any procedures on the patient's body, especially in organ procurements. The soul is what animates biological life. Thus, any signs of biological life is a sign of the presence, even if lingering, of the soul.⁴⁸

As many understand, death occurs when the soul separates from the whole body. In the issue of brain death, the separation of the soul from the body is doubted because the timing of when

45. Siraj Wahab, "Expert Calls for New Fatwa on Brain Dead" (Saudi Arabia, 29 September 2010) <<http://www.arabnews.com/node/356370>>. (accessed on 6 February 2017).

46. Sherine Hamdy, "Not Quite Dead: Why Egyptian Doctors Refuse the Diagnosis of Death by Neurological Criteria," *Theoretical Medicine and Bioethics* 34, no. 2 (2013): 147–60.

47. Ibid.

48. Ibid.

the soul completely departs from the body is still unknown. This is because the respiration and blood flow in the arteries are still functioning with the help of resuscitation devices. Bedir & Aksoy in their article explain that the most important evidence proving the separation of the soul is the absence of respiration.⁴⁹ As the soul is still within the body, any encroachment on the patient's body causes pain to the patient.⁵⁰ Sometimes, acceptance of the brain death concept is highly influenced by cultural perspective.⁵¹

As previously described by al-Rāzī, the heart is the last organ in the body to die. Therefore, when a person's brain is diagnosed as dead, it cannot be considered dead because the main organ which connects the soul and the body is still functioning. Hence, those who subscribe to such an opinion, will not accept brain death as a death.

A Brain Dead Person is Dead

The brain death issue has long been controversial until today. Those who accept the concept of brain death have their own arguments to substantiate the statement, while those who disagree will also have theirs. The brain is the main organ in the body. It controls the whole body functions and cannot be replaced by any other devices or machines. The control centre for respiration, neural, vasomotor, hormonal and neurotransmitter is located in the brain.⁵² It receives stimuli which it processes, integrates and responds.⁵³ By logic, when the control centre of the whole body functions is dead or ceases functioning, it can be argued that the body is also dead because there is no control centre to give instructions to the body.

49. A. Bedir and S. Aksoy, "Brain Death Revisited," 290–94.

50. Ibid.

51. Kerry W. Bowman and Shawn A. Richard, "Culture, Brain Death, and Transplantation," *Progress in Transplantation* (Aliso Viejo, Calif.) 13, no. 3 (2003): 211–217.

52. Zaki Morad, "Guideline of the Malaysia Medical Council," 17–18.

53. "Consensus Statement."

In an interview, Professor Dr. Zamzuri Idris⁵⁴ is of the opinion that the seat of the soul is located in the brain because the brain is the organ that controls all the bodily functions. According to him, when the brain is dead, the whole body is also dead. Once a doctor confirms and announces a brain death of a patient, the ventilator support should be discontinued on the patient.⁵⁵ The continuing heart beats are due to the aid of the ventilator, rather than a form of spontaneous action.

Abd al-Fattah Mahmud Idris,⁵⁶ in his book *al-Ghaybūbah Al-Dimāghīyyah* explains that the main task of the soul is to enable deliberate movement of the limbs, neither coerced nor forced. Brain death is a condition in which the brain has not received any food whilst the body still “works” with the help of a ventilator. The ventilator will move the lungs, heart, blood and others. Life in such a condition is called *al-ḥayāh al-nabāṭīyyah* which completely depends on machine support rather than being controlled by itself. Human life ends when the soul departs from the body. The existence of a deliberate movement is a sign that the soul still remains in the body, while the absence of this condition shows the soul has departed from the body.

The argument that the soul still exists in the body because the heart keeps on beating is countered by the physiological fact that the heart of a foetus beats in a mother’s womb, although at the material time, the soul is not present in the foetus. The soul is blown into the foetus when it is 120 days or four months old as described in the following Hadith:

Narrated by `Abdullah: Allah’s Messenger (ﷺ), the truthful and truly-inspired, said, “Each one of you collected in the womb of his mother for forty

54. Head of the Department of Neurosciences, Universiti Sains Malaysia (USM), Pulau Pinang, Malaysia.

55. Sajid Iqbal, “Accepting End of Life Care Realities—When the Choices Are Limited,” *Journal of Clinical Research & Bioethics* 4, no. 4 (2013): 1.

56. ‘Abd al-Fattah Maḥmūd Idris, *al-Ghaybūbah Al-Dimāghīyyah: Jadāl Bayn Al-Abbā’ Wa Al-Fuqahā’*, 1st. ed. (Riyadh: Dar al-Sumay’i, 2011).

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days, and then turns into a clot for an equal period (of forty days) and turns into a piece of flesh for a similar period (of forty days) and then Allah sends an angel and orders him to write four things, i.e., his provision, his age, and whether he will be of the wretched or the blessed (in the Hereafter). Then the soul is breathed into him.” (*Sahih al-Bukhari*)

The heart can beat by itself because it has its own pacemaker. Early signs of the development of the cardiovascular system occur within the first few days until day 18 or 19.⁵⁷ The first blood vessel in the embryo exists on the 20th day. On the next day, the formation of the heart tube is completed. According to Pansky,⁵⁸ the heart starts to beat on day 22, but circulation will only start on day 27 until 29. This shows that even when the soul is not present in the body yet, the heart has started beating. This indicates that the heartbeat is not the absolute indicator in determining a person’s life and death. In this example, the embryonic heart is beating even before the soul comes in. Haque has stated in his study that understanding Muslim personhood (*rūh*) as “embodied consciousness” should help diminish the reluctance in Muslim communities to accept the notion of brain death.⁵⁹

As aforementioned, disagreement regarding brain death occurs because although the Quran states that death occurs when the soul is separated from the body, it neither gives details about the nature of the soul, its position in the human body⁶⁰ nor the exact time it departs from the body. Another factor why some people disagree with the brain death concept is because they believe that brain death is merely created to facilitate organ

57. R. Abdulla et al., “Cardiovascular Embryology,” *Pediatric Cardiology*, 25.3 (2004): 191–200.

58. Ben Pansky, *Review of Medical Embryology* (New York: McMillan, 1982).

59. O. S. Haque, “Brain Death and Its Entanglements,” 13–36.

60. Abul Fadl, “Islamic Jurisprudence,” 189–96.

procurement process.⁶¹ In actuality, the history of the brain death concept and that of organ procurement have very separate origins. Organ transplantation became possible with technical advancement in surgery and immunosuppressive treatment, while the concept of brain death evolved with the introduction of intensive care units.⁶² A historical review demonstrates that the brain death concept and that of organ transplantation arose separately and advanced in parallel, and only began to progress together in the late 1960's.⁶³

Padela and a few other scholars explain that confusion in this issue is due to the lack of Islamic consensus and clarity on neurological criteria.⁶⁴ Many people are still confused and frightened when faced with this issue because the concept has yet to be properly understood even among medical practitioners themselves.⁶⁵ Moreover, a subject such as death has always been a taboo in many societies.

Conclusion

Although discussions on the issue of brain death are still rife, the majority accept it as a death. Following the *Ijtima' Fiqh* in 1987, Malaysia has issued a *fatwa* on this issue after a serious study had been conducted and profound discussions between medical practitioners and Islamic scholars were held. Acceptance of brain death as death will not infringe the principles of Islam. Patients diagnosed with brain death are in a state that is medically impossible to heal. Therefore, giving a ventilator to those with better prognosis is believed to be a better choice.

61. S. Hamdy, "Not Quite Dead," 147–60.

62. C. Machado, "Diagnosis of Brain Death," 2.

63. E.F.M. Wijdicks, "Brain Death Worldwide," 20–25. Also in C. Machado, "Diagnosis of Brain Death," 2.

64. A. I. Padela et al., "Brain Death in Islamic Ethico-Legal Deliberation," 132–39.

65. L. A. Siminoff, C. Burant and S. J. Youngner, "Death and Organ Procurement," 2325–34.

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Nonetheless, discussions on brain death should continue. Various parties who accept brain death as death and those who reject the concept should engage with each other in order to try and reach a consensus. Arguing in silos would not contribute towards finding a solution. At the same time, new medical developments which are relevant to the issue should be proactively deliberated upon so as to ensure that knowledge on the end of life is updated.

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