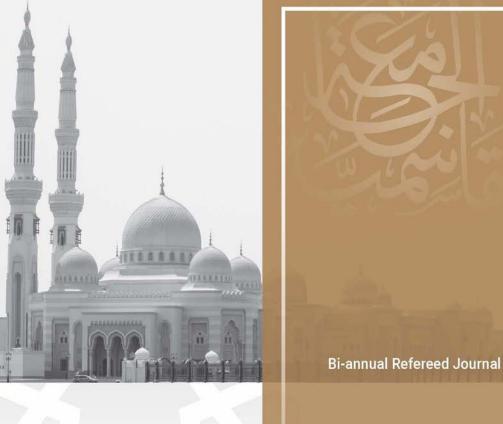
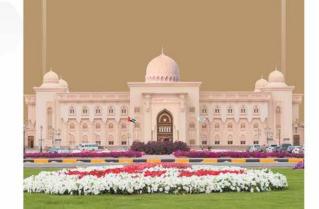
# **AL QASIMIA UNIVERSITY JOURNAL** OF **SHARI'A SCIENCES & ISLAMIC STUDIES**





Vol.1, No. 2 Rabi' II , 1443 A.H. / December 2021 A.D. ISSN: 2788 -5526



AQU Journal of Shari'a Sciences and Islamic Studies, Vol.1 No.2, pp. 185- 212 (Dec.2021) DOI:10.52747/aqujssis.1.2.66 E-ISSN 2788-5534 / ISSN 2788-5526

## EUTHANASIA AND ISLAMIC RULINGS PERTINENT TO MAINTAINING AND REMOVING ARTIFICIAL LIFE SUPPORT DEVICES<sup>1</sup>

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الملخص تُعنى هذه الدراسة ببيان الحكم الشرعي في نزع أجهزة الإنعاش من المريض الميت دماغيًا. ونعني بالموت الدماغي: الغياب التام الدائم لوظائف جذع الدماغ ولا يكتفى بموت قشرة المخ. وأجهزة الإنعاش تستعيد وظائف القلب ونظام التنفس والتي من المكن أن ينجم عن ذلك استعادة كاملة لوعي المريض وكافة وظائفه الأساسية، بل وبإمكان المريض أن يستعيد تنفسه الطبيعي وأن يغادر المشفى بحالة صحية تامة. وبناء على ذلك، فإنه ليس من الجائز للطبيب أن يترع هذه الأجهزة قبل أن يموت جذع المخ، وإلا فإنه لو نزعها لأحدث ذلك موتا محققا للمريض. والطبيب مسؤول لو امتنع عن تقديم العون اللازم للمريض الحي من الناحية الشرعية والطبية. ويجوز للطبيب أن يترع تلك الأجهزة بمجرد تحققه من موت جذع المخ في ضوء التشخيصات المبينة، ومن ثم يمكن نقل المريض

<sup>&</sup>lt;sup>1</sup> Article received: August 2021; article accepted: October 2021

## Abstract

This paper is intended to elaborate on the legal ruling of removing life support from a brain-dead person. Brain death means the permanent absence of brainstem and cerebral functions, not only the death of the brain cortex. Life support devices restore the functions of the heart and respiratory system, which sometimes result in the full recovery of consciousness of the patient and all of his basic functions. It is possible for the patient to restore normal breathing and leave the hospital in a full healthy state. On this basis, it is not permissible for a doctor to remove these devices before the brainstem dies, otherwise this would cause a real and irreversible death of the patient. In this case, the doctor bears full civil and criminal responsibility. The doctor is held accountable if he refrains from providing assistance to this patient who is legally and medically alive. It is permissible to remove artificial life devices once the death of the brain is ascertained in the light of the above-mentioned diagnoses. Then, the patient will be transferred to another room, but his death is announced only after the heart stops functioning. It is from this moment that the rulings of death are applied. The responsibility of removing these devices and declaring death is the work of a specialized medical committee that approves the diagnosis and issues a burial permit.

الكلمات المفتاحية: الأحكام الفقهية، موت الرحمة، الإنعاش، جذع المخ، نقل الأعضاء.

**Keywords**: Juristic rulings, euthanasia, life sustenance, brain stem, organ transplant.

#### 1. Introduction

For centuries, people have considered a person alive as long as he is breathing. As the medical sciences advanced, they realized that breathing is nothing more than a means of maintaining the heart which is responsible for blood circulation. As long as such activity provides the nutritional needs of the brain, the person remains alive. Nevertheless, doctors in the middle of the twentieth century realized that since the brain requires more energy than the rest of the organs, if its needs are not met, it stops activity while other parts of the body require less energy and may remain alive and recover activity as long as the blood circulation continues.

Thus, when a person is kept on life support, the chest moves by means of the device, and the heart beats through a self-center in the heart as a result of the arrival of oxygen. When the heart pumps blood to the organs, the kidneys work and hair and nails grow, although the brain has died, and even started to decompose<sup>2</sup>. If these devices are removed, the organs will stop activity and will settle. Thus, the patient can be considered dead as soon as the brain dies, and hence the life support devices can be removed. After this all the consequences of death can ensue, such as using the organs in transplantation and determining the time of death legally so that the deceased can be inherited. If it is permissible to remove these devices, then is the matter momentary measured in time or phased in relation to diagnosis, and is the matter settled by the doctor or the patient's guardians? These are the questions that this study will attempt to answer.

In order to answer the first question, we must define "life" and "death" from the perspective of the majority of jurists and doctors. Then we must decide whether brain death is real death, in order to be able to reach the ruling on removing artificial life support devices from those who are brain dead, and to be able to know how to diagnose brain death.

## 2. The Concepts of "Life" and "Death" in Islamic Sacred Law

Life refers to a mood force requiring sensory feeling and movement<sup>3</sup>. This force is embedded in the soul, and it is difficult to

<sup>&</sup>lt;sup>2</sup> Al-Mahdī, Mokhtār, "*Al-Ḥayāh Al-Insāniyya Bidāyatuha wa Nihāyatuha fī Al-Mafhūm Al-Islām*," paper submitted to the Symposium on Human Life, its Beginning and End, held in Kuwait 1405 AH, p. 333.

<sup>&</sup>lt;sup>3</sup>Al-Fayrūzabādī, Majd Al-Dīn Abū Ṭāhir Moḥammad bin Yaʿqūb, *Al-Qāmūs Al-Muḥīț* (Beirut: Mu'assasat Al-Risālah 1998), 1:773; Ibn Manzūr,

determine its reality. Nonetheless, many Prophetic traditions delineated its characteristics, such as the blowing of the soul into the fetus, dividing souls into similar groups, and souls meeting during sleeping. Perhaps the definitions of " $r\bar{u}h$  (soul)" from the perspective of Muslim scholars may elucidate some of its characteristics and the soul-body relationship. These definitions may in turn elucidate the concepts of life and death from the perspective of Muslim scholars.

The following are some of the characteristics of the soul.

1. It leaves the body when this body is unable to respond to it by accepting its effects of sensory perception and movement. This means that the coexistence of the soul and the human body depends on the ability of this body to serve this soul.

2. It is the cause of voluntary movement. Al-'Ukbarī defines "soul" as "that which causes the movement of that which it is intertwined with.

3. It is the source of conscious will and ability emanating from this will. Ibn al-Kamāl says: "Life is an attribute providing knowledge and ability to the one having this attribute<sup>5</sup>."

4. It involves growth (which is plant life); movement and sensory perception (which is animal life); and perception and interaction (which is human life). Al-Harrālī says that the soul can be considered as an integration that can be seen on the level of plants in growth and vibration, that can be seen on the level of animals in movement and sensory perception, and that can be seen on the level of humans in their behavior and conduct and in their knowledge and manners<sup>6</sup>.

Muslim jurists agree that death means that the soul leaves the body, and that death has visible signs<sup>7</sup>. Nevertheless, they debate the nature and extent of this departure. For instance, death, according to

Mohammad bin Makram bin 'Alī, Lisān Al- 'Arab (Beirut: Dār Ṣādir 1414), 1:773.

<sup>&</sup>lt;sup>4</sup> Al-Munāwī, Moḥammad ʿAbdul-Raūf, *Al-Tawqīf ʿla Muhimmāt Al-Ta'ārīf*, ed. Moḥammad Rudwān Al-Dābbah, (Beirut: Dār Al-Fikr Al-Muʿāşir 14119 AH), p. 301.

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid

<sup>&</sup>lt;sup>7</sup> Al-Nawawī, *Al-Majmū Sharh Al-Muhadhdhab* (Jeddah: Maktabat Al-Irshād, n.d.), 5:105; Al-Shirbīnī, Al-Khatīb Shams Al-Dīn Mohammad bin Ahmad, *Mughnī Al-Muhtāj ilā Ma rifat Al-Fādh Al-Minhāj* (Beirut: Dār Al-Kutub Al-'Ilmiyyah 1994), 1:32; Al-'Izz bin 'Abdul-Salām, *Qawā id Al-Ahkām fi Maşālih Al-Anām*, ed. Ṭāha 'Abdul-Ra'ūf Sa'd (Cairo: Maktabat Al-Kullyiāt Al-Azhariyyah 1991), p. 696; Al-Madisī, Najm Al-Dīn Abū Al-'Abbās bin Qudāmah, *Mukhtaṣar Minhāj Al-Qāṣidīn* (Damascus: Maktabat Dār Al-Bayān, n.d.), p. 449

Shafi ī jurists, means that the soul leaves the body. However, they offer various views regarding the extent of this leaving. For example, Shaykh Sulaymān Al-Jamal considers a person as dead even if some of the body parts are still alive. He says: "It is not far-fetched that eyesight remains after the soul leaves the body because the body still has its [normal] temperature, especially in a body part closer to the place where the soul leaves the body. The soul enters and exits the body from the fontanel, and therefore the eye is the last thing from which the soul is removed. <sup>8</sup>" This means that the soul leaves the body in stages, and thus it is possible that it leaves a body part before another body part.

Al-Ghazālī says: "Death means a change of state only. The soul remains after leaving the body, either tormented or blessed. When the soul leaves the body, this means that it no longer controls the body and that the body no longer obeys it.<sup>9</sup>" When the soul leaves the body, does this mean that it leaves some or all of the body parts? Al-Ghazālī says: "Death means that all body parts no longer obey the soul. All body parts can be considered as instruments utilized by the soul. The soul refers to that which perceives human knowledge, pain and pleasure. There is a considerable debate among contemporary scholars on the meaning of the soul leaving the body. For example, Shaykh Bakr Abū Zayd believes that this means that the soul leaves every body part<sup>10</sup>. Moreover, some scholars contend that this means the death of all cells. A proponent of this opinion is Dr. 'Abd Al-'Azīz Ismā'il, who demonstrates that death means the death of all body systems and their breakdown into primary elements<sup>11</sup>. Nonetheless, this definition is criticized for inconsistency with reality, as it is possible to preserve dead bodies for thousands of years from decomposition through mummification, although the persons of these corpses experienced a real death <sup>12</sup>. Moreover, this definition opposes the Qur'anic declaration that only God can resurrect the dead: "Verily it is We who resurrect the dead." Furthermore, through experience it is impossible to give life back to a person after brain death rather than after the decomposition of body parts.

<sup>&</sup>lt;sup>8</sup> Al-Jamal, Sulaymān, *Hāshiyat Al-Jamal ʿala Al-Manhaj li Shaykh Al-Islām Zakariyya Al-Anṣārī* (Beirut: Dār Al-Fik, n.d.), 3: 363.

<sup>&</sup>lt;sup>9</sup> Al-Ghazāli, Moḥammad bin Moḥammad Abū Ḥāmid, *Iḥyā ' Ulūm Al-Dīn* (Beirut: Dār Al-Ma rifah, n.d.), vol. 4, p. 494.

<sup>&</sup>lt;sup>10</sup> Bakr Abū Zayd, *Fiqh Al-Nawāzil*, Beirut: Mu'assasat Al-Risālah, p. 225.

<sup>&</sup>lt;sup>11</sup> Islmā'īl, 'Adul-'Azīz, "Al-Islām wa Al-Ţibb Al-Ḥadīth," in *Al-Azhar Magazine*, vol. 27 (1417), p. 691.

<sup>&</sup>lt;sup>12</sup> Hathūt, Māhir, *Al-Ahkām Al-Shari ʿīyyah li Al-A ʿmāl Al-Ṭibbiyyah* (Beirut: Dār Al-Fikr, 1998), p. 168.

Additionally, Dr. Muhammad Zuhayr Al-Qāwī added that when the soul leaves the body, it does not come back, as the Qur'ān asserts; Qur'ān  $23:99-100^{13}$ .

Perhaps the rationale behind the scholarly debate on the concepts of life and death is the classification of life by jurists into three types. They are as follows:

1. Continuous life, which is the life of someone who is not affected by a disease or an accident.

2. Stable life, as in the case of 'Umar. After he was stabbed, and it was certainly believed that his death was imminent, he was stating his will and administering state affairs. This life, like the one before, is inviolable.

3. The life of that which is slaughtered that has no eyesight, perception and voluntary movement after removing the entrails or after slaughter. However, it may have pulse in its veins and convulsions<sup>14</sup>. This case has special provisions.

Further, the rationale behind this scholarly debate is that these early scholars recognized the apparent signs of death. Medical discoveries were not developed at their time in a way that would enable them to pass a ruling on the one whose brain is dead. From these definitions, it becomes clear that "life" refers to a mood force requiring sensory perception, movement, will and power; that the soul is the factor providing life; and that "death" takes place when the soul leaves the body due to the lack of coordination between the soul and body parts. According to Sunni jurists<sup>15</sup>, the signs showing that the soul left the body comprise relaxation of the feet, the separation of the palms of the hands, the temples going down, the nose leaning, the face skin extending, the testicles shrinking and their skin extending, the cessation of breath, eyesight sharpening, and the lips separating. Ibādī jurists add the following sign: the absence of pulse, and this can be checked by palpating a vein between the ankle and the heel and

<sup>&</sup>lt;sup>13</sup> Moḥammad Zuhayr Al-Qāwī, *Mawt Al-Dimāgh,* http://www.islamset.com/arabic/abioethics/death/index.html

<sup>&</sup>lt;sup>14</sup> Al-Anşārī, Zakariyya, Asnā Al-Maţālib fi Sharh Rawd Al-Ţālib (Beirut: Dār Al-Kitāb Al-Islāmī, n.d.), 4:11, 12; Ibn ʿAbidīn, Radd al-Muhtār ʿala Al-Durr al-Mukhtār, (Beruit: Dār Al-Fikr, n.d.).

<sup>&</sup>lt;sup>15</sup> Ibn 'Abidīn, *Radd Al-Muḥtār 'ala Al-Durr Al-Mukhtār* (Beirut: Dār Al-Fikr, 1992), 6: 496; Al-Kharishī Moḥammd bin 'Abdullah Al-Kharshī, *Sharḥ Mokhtaşar Al-Khalīl*, (Beirut: Dār Al-Firk, n.d.), 2: 123; Al-Shāfi'ī, Moḥammad bin Idrīs, *Al-Umm* (Beirut: Dār Al-Ma'rifah, 1990), 1: 314; Al-Mirdāwī, *Al-Inṣāf fi Ma 'rifat Al-Rājiḥ mina Al-Khilāf 'ala Madhhab Al-Imām Aḥmad bin Ḥanbal* (Beirut: Dār Iḥyā' Al-Turāth Al- 'Arabī, n.d.), 2:469.

another vein in the anus. Notwithstanding, jurists did not rule out the possibility of having further signs<sup>16</sup>.

There is a slight difference between classical Muslim jurists' perception of death and that of modern medical specialists. Human death is, however, categorized into two alternative types; neurological or cardiorespiratory in organ donation<sup>17</sup>. The jurist's definition for death is close to be neurological or cardiorespiratory. The criterion of this type of death is the irreversible loss of consciousness and spontaneous respiration in heart-beating organ donors<sup>18</sup>. Rady affirms that a utilitarian death definition can have unintended consequences for dying Muslim patients such as "diagnostic errors in determining death for transplantable organs, lack of equivalence between these symptoms and brain death, and end-of-life religious values and traditional rituals may be sacrificed<sup>19</sup>. Consequently, Rady reiterates the need to revise the definition of death in Muslim communities. He concluded that "it is imperative to reevaluate the two different types and criteria of death introduced by the Resolution (Fatwa) of the Council of Islamic Jurisprudence on Resuscitation Apparatus in 1986.<sup>20</sup>" The reason for this reevaluation, he assumes, is that the fatwas permitting end-of-life organ donations were based on currently outdated knowledge and understanding of the phenomenon of human death.

Rady and Verheijd see brain death as a novel construct of death for the procurement of transplantable organs<sup>21</sup>. Many authoritative Islamic organizations and governments have endorsed brain death as true death for organ donation. They clarified that the Quran distinguishes death from the dying process, brain death belongs scientifically within the spectrum of neurologic disorders of

<sup>&</sup>lt;sup>16</sup> Ațfish, Moḥammad bin Yūsuf bin 'Isā Ațfish, *Sharḥ Al-Nīl wa Shifā' Al-*'*Alīl*, (Maktabat Al-Irshād, n.d.) 2:558.

<sup>&</sup>lt;sup>17</sup> The President's Council on Bioethics (2008). Controversies in the determination of death. A White Paper

of the President's Council on Bioethics. Retrieved August 23, 2012, from http://bioethics.geo

rgetown.edu/pcbe/reports/death/.

<sup>&</sup>lt;sup>18</sup> Rady MY, Verheijde JL. Brain-dead patients are not cadavers: the need to revise the definition of death in Muslim communities. HEC Forum. 2013 Mar;25(1):25-45. doi: 10.1007/s10730-012-9196-7.

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Rady MY, Verheijde JL. A Response to the Legitimacy of Brain Death in Islam. J Relig Health. 2016 Aug;55(4):1198-205. doi: 10.1007/s10943-016-0221-z. PMID: 27010462; PMCID: PMC4882366.

consciousness and should not be confused with death, and religious and legal discord about brain death has grown in jurisdictions worldwide<sup>22</sup>.

## 3. Life and Death from the Medical Perspective

Miller admits variation and controversy on that the criteria for determining death among doctors. It is further based on the manner those criteria are applied which may "vary by clinical setting or even by physician within a clinical setting.<sup>23</sup>" Miller provides various methods for determining death. They include the neurologic criteria to evaluate brainstem function.

In the field of medicine, there are five levels of human life. They are as follows:

1. An awake conscious human life.

2. Plant life. In some cases of coma caused by severe injuries to the brain, a large part of the brain is destroyed, especially in the cerebral cortex, which contains all kinds of sensory perception centers and voluntary muscle movement centers, with the brainstem remaining intact and the patient breathing spontaneously.

3. Organic life. It describes what remains of life in the body parts of a human after death under intensive care equipment, such as artificial respiration and other necessary means of care. The heart beats and pushes blood to all body parts except the brain; the kidneys excrete urine; and the digestive system digests and absorbs food.

4. Histological life. It describes the life of a group of human cells, often in a culture in a laboratory. The means of transplanting body tissues, blood cells, frozen eggs, sperm, and the like make these tiny parts of the body remain alive even if the person from whom they were taken dies.

5. Cellular life, which is the life of a single human cell. Science identifies levels of life in which a person can be considered as a living being, and other levels in which a person cannot be considered as a living being, even though his body parts and cells are alive, performing their very sophisticated and miraculous functions, of which modern science is still unable to comprehend all aspects<sup>24</sup>.

This can be summed up in Dr. Faisal Shāhīn's definition of a "human" as "a body containing living cells and body parts working with self-inspiration at the level of a single cell and at the level of a body part, provided that the causes of this life are physically available

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Miller, Andrew C., "Brain death and Islam," p. 2.

<sup>&</sup>lt;sup>24</sup> Al-Mokhtār Al-Mahdī, *Mafhūm Wafāt Al-Insān*, http://www.islamset.com/arabic/abioethics/death/index.html

in addition to a soul-r $\bar{u}h$  that we may call a human self or being and by which the personality and individuality of a person can be determined<sup>25</sup>."

From a medical perspective, there are three primary stages of death. In the first stage, clinical death takes place when the heart and lungs stop functioning. In the second stage, brain cells die a few minutes after the oxygen-carrying blood does not reach the brain. After these two stages take place, the cells of the body remain alive for a period that varies from one part of the body to another, and at the end of this period, all cells die, marking the third stage of death, namely cellular death<sup>26</sup>.

From physicians' perspective, death takes place in two cases.

1. Irreversible cessation of the functions of the circulatory and respiratory systems. Irreversibility is an essential characteristic of death. According to Souter, if an individual can be revived, they may have been "near death" but physicians would not describe them as actually being resurrected from the dead<sup>27</sup>. Cessation of human life can be ascertained by measuring the lack of responsiveness, heartbeat, and respiratory effort.<sup>28</sup>. However, KG Karakatsanis raised the question on whether current clinical criteria and confirmatory tests for the diagnosis of 'brain death' satisfy the requirements for the irreversible cessation of all functions of the entire brain including the brainstem. He assumed that "all functions of the entire brain (or those of the brainstem) in 'brain-dead' patients have ceased, is invalidated. 29 " He calls for the reconsideration of the dominant concept of "brain death". Karakatsanis based his assumption on four arguments; patients diagnosed as brain dead provided residual vegetative functions coordinated by the brain or the brainstem, (2) the impossibility of testing cerebral function due to malfunction of tracts of passage to and from the cerebrum, (3) patients provide complex spinal cord responses and automatisms which may originate in the

<sup>&</sup>lt;sup>25</sup> Faysal 'Abdul-Raḥīm Shāhīn, *Ta 'rīf Al-Mawt*, <u>http://www.islamset.com/arabic/abioethics/death/index.html</u>

<sup>&</sup>lt;sup>26</sup> This is the definition adopted by Hathūt, *Al-Ahkām Al-Shar 'iyyah*.

<sup>&</sup>lt;sup>27</sup> Souter M, Van Norman G. Ethical controversies at end of life after traumatic brain injury: defining death and organ donation. Crit Care Med. 2010 Sep;38(9 Suppl):S502-9. doi: 10.1097/CCM.0b013e3181ec5354. PMID: 20724884.

<sup>&</sup>lt;sup>28</sup> Hasan Hasan 'Alī, *Al-Afkār Al-Qadīmah wa Al-Hadīthah ḥawla Taḥdīd Al-Mawt*, <u>http://www.islamset.com/arabic/abioethics/death/index.html</u>

<sup>&</sup>lt;sup>29</sup> Karakatsanis, KG, "Brain death': should it be reconsidered?" *International Spinal Cord Society*, (2008) 46, 396–401, doi:10.1038/sj.sc.3102107.

brainstem and (4) none of confirmatory tests has the necessary positive predictive value for the reliable pronouncement of human death<sup>30</sup>.

2. Irreversible cessation of all brain functions, including the brainstem functions. The cessation of all brain functions can be ascertained in two ways:

A. The absence of brain activities. This is indicated by a deep coma, a lack of responsiveness, and by conducting a confirmatory study, such as an electroencephalogram, and checking blood flow to the brain.

B. The absence of brainstem activities. This is a reliable test for the absence of pupillary, corneal, oculocephalic, vestibular,

oropharyngeal and cough reflexes. As for asphyxia, it can be confirmed by an asphyxiation test<sup>31</sup>. Furthermore, ancillary tests are needed such as tests of intracranial blood circulation,

electrophysiological tests, metabolic studies and tests for residual vagus nerve function<sup>32</sup>.

According to Miller, "this level of detailed assessment may be inappropriate for use in an acute resuscitation setting because some medications used in the process of CPR can confound the examination (ie, sedation, neuromuscular blockers used to secure an artificial airway<sup>33</sup>.

However, the definition of brain death has debated in Western medicine. In 1980, the Uniform Determination of Death Act defined brain death as, " An individual who has sustained either: (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including brain stem, is dead. A determination of death must be made in accordance with accepted medical standards.<sup>34</sup> " According to Wijdicks, et al, "complex-spontaneous motor movements and false-positive triggering of the ventilator may occur in patients who are brain dead.<sup>35</sup>" According to Eynon, "Brainstem death has been defined

<sup>&</sup>lt;sup>30</sup> Hathūt, Māhir, Al-Ahkām Al-Shari iyyah, 168.

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> Young GB, Shemie SD, Doig CJ, Teitelbaum J. Brief review: the role of ancillary tests in the neurological determination of death. Can J Anaesth. 2006 Jun;53(6):620-7. doi: 10.1007/BF03021855. PMID: 16738299.

<sup>&</sup>lt;sup>33</sup> Miller, Andrew, C., " Brain Death and Islam," p. 2

<sup>&</sup>lt;sup>34</sup> National Conference of Commissioners on Uniform State Laws, Uniform Determination of Death Act, Chicago, IL: National Conference of Commissioners on Uniform State Laws; 1981.

<sup>&</sup>lt;sup>35</sup> Wijdicks EF, Varelas PN, Gronseth GS, Greer DM; American Academy of Neurology. Evidence-based guideline update: determining brain death in adults: report of the Quality Standards Subcommittee of the American

as 'permanent functional death of the brainstem.<sup>36</sup>" The important thing about this diagnosis is the irreversible nature of this change to the brain<sup>37</sup>.

### 4. Brain Death: Concept and Diagnosis

According to Souter, development of the concept of brain death coincided with advances in medical technology that facilitated artificial ventilation and organ transplantation<sup>38</sup>. Souter further argues that the process of "timed" death with subsequent organ donation (controlled donation after cardiac death transplantation) has raised controversial questions having to do with the limits of treatments that facilitate organ transplant but might hasten death, and the duration of cardiac arrest necessary for declaration of death and the commencement of organ procurement.

Physicians agree on defining brain death as "permanent absence of the functions of brainstem and brain<sup>39</sup>." This is the definition adopted in the United States. Nonetheless, the criteria for death diagnosis vary, as can be seen in the criteria adopted by Harvard University<sup>40</sup>, Minnesota University<sup>41</sup>, and the Canadian Medical Association<sup>42</sup>. However, they all agree that brain death means the cessation of all brain functions. In the United Kingdom, brain death refers only to brainstem death.

However, attitudes toward death criteria had a role in the debate on organ donation among health care personnel and the general public. James M. DuBois and Emily E. Anderson reviewed various attitudes toward organ donation based on brain death, the irreversible loss of all functions of the entire brain; higher brain death, the loss of cerebral cortex function alone; and the circulatory-respiratory criteria commonly used in donation after cardiac death. They concluded that

<sup>39</sup> Dr. Hātim Al-Hajj, Athar Taṭawwur, p. 242.

Academy of Neurology. Neurology. 2010 Jun 8;74(23):1911-8. doi: 10.1212/WNL.0b013e3181e242a8. PMID: 20530327.

<sup>&</sup>lt;sup>36</sup> Eynon, C.A, "Brain death and brainstem testing," *Care of the Critically Ill*; (2005) 21: 5, 147–150.

<sup>&</sup>lt;sup>37</sup> Goila AK, Pawar M. The diagnosis of brain death. Indian J Crit Care Med. 2009 Jan-Mar;13(1):7-11. doi: 10.4103/0972-5229.53108.

<sup>&</sup>lt;sup>38</sup> Souter, "Ethical controversies," p. 504.

<sup>&</sup>lt;sup>40</sup> 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; 205:337 - 40.

<sup>&</sup>lt;sup>41</sup> Wiidicks EFM. Determining brain death in adults. Neurology 1995; 45:1003 - 1011

<sup>&</sup>lt;sup>42</sup> Halevy A. Brain death. Ann Intern Med 1993; 119: 519-525.

"concerns about donation after cardiac death surround the withdrawal of life support more than the actual death criteria used; and concerns about death criteria correlate with less favorable attitudes toward organ donation.<sup>43</sup>"

Moreover, the rising need for organ transplantation in the West led to reinterpreting religious scriptures to meet utilitarian medical objectives. Rady and Verheijde assume that the source of controversy on organ donation among contemporary Muslim jurists "stems from scientifically flawed medical criteria of death determination and invasive perimortem procedures for preserving transplantable organs.<sup>44</sup>" The debate went extremely to "recruiting faith leaders at mosques to overcome religious barriers to organ donation, and to increase donor registration among Muslims.<sup>45</sup>" Sarah Wahlster, et al, referred to discrepancies in the identification of brain death based on improvement of gaps in medical education, and formalization of protocols in lower-income countries which provide first pragmatic steps to reconciling these variations. She questions the availability and practicality of a harmonized, uniform standard for brain death worldwide<sup>46</sup>.

Opoku assumes that religious involvement in medical technologies like transplantation medicine gives to individuals the greatest chance of being able to help others with their organs after death under well-guided means<sup>47</sup>. He further argues that organ transplantation medicine has the goal of assisting people to care life

<sup>&</sup>lt;sup>43</sup> DuBois, James M. and Emily E. Anderson, "Attitudes toward death criteria and organ donation among healthcare personnel and the general public," *Progress in Transplantation*, vol. 16, No. 1, (2006).

<sup>&</sup>lt;sup>44</sup> Rady, M.Y., Verheijde, J.L. The moral code in Islam and organ donation in Western countries: reinterpreting religious scriptures to meet utilitarian medical objectives. Philos Ethics Humanit Med 9, 11 (2014). https://doi.org/10.1186/1747-5341-9-11

 <sup>&</sup>lt;sup>45</sup> Rady MY, Verheijde JL. Campaigning for Organ Donation at Mosques.
 HEC Forum. 2016 Sep;28(3):193-204. doi: 10.1007/s10730-016-9302-3.
 PMID: 26940813; PMCID: PMC4977327.

 <sup>&</sup>lt;sup>46</sup> Wahlster S, Wijdicks EF, Patel PV, Greer DM, Hemphill JC 3rd, Carone M, Mateen FJ. Brain death declaration: Practices and perceptions worldwide. Neurology. 2015 May 5;84(18):1870-9. doi: 10.1212/WNL.00000000001540

<sup>&</sup>lt;sup>47</sup> Cotrau P, Hodosan V, Vladu A, Daina C, Daina LG, Pantis C. Ethical, Socio-Cultural and Religious Issues in Organ Donation. Maedica (Bucur). 2019;14(1):12-14. doi:10.26574/maedica.2019.14.1.12

and increase life span of most people who would have die as a result of organ failure<sup>48</sup>.

We must admit that we face ethical and religious challenges in organ donation and transplantation which took part in the debate on brain death. Mark P. Aulisio, et al, identified ethical challenges facing both critical care professionals and organ donors. Those challenges should have an impact on the relationship between end-of-life decisions and organ transplantation. Most of those ethical challenges include "identifying appropriate goals for care, determining decision making authority [and] identifying surrogate decision makers.<sup>49</sup>" They also include the type and amount of care provided for brain-dead patients during the process of decision making, and how to manage diseases in patients approaching brain death or who are potential candidates for DCD.

Jan A. Ali remarks that there are nuances of increasing acceptability of organ donation and transplantation in contemporary Muslim communities, but there still remains an aura of uncertainty about whether Islam considers organ donation and transplantation to be permissible. The uncertainty originates from ambiguity caused by conflicting opinions among contemporary Muslim scholars and jurists<sup>50</sup>.

## 4.1. Diagnosis of Brain Death<sup>51</sup>

Before considering brain death diagnosis, the following preconditions should be fulfilled:

(a) The patient should be in a deep coma and all efforts to make him come out of it fail.

(b) The cause of the coma should be severe damage to the structure of the brain due to (1) a severe injury (such as a severe trauma to the head or massive brain hemorrhage), (2) a head surgery, (3) a large tumor inside the skull, or (4) the cessation of blood supply to the brain for

<sup>&</sup>lt;sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> Aulisio MP, Devita M, Luebke D., "Taking values seriously: Ethical challenges in organ donation and transplantation for critical care professionals," Crit Care Med. 2007 Feb;35(2 Suppl):S95-101. doi: 10.1097/01.CCM.0000252915.76019.19.

<sup>&</sup>lt;sup>50</sup> Ali, Jan A. 2021. Islamic Perspectives on Organ Transplantation: A Continuous Debate. Religions 12: 576. https://doi.org/10.3390/rel12080576
<sup>51</sup> These requirements have been quoted from the conclusions and recommendations of the Symposium on Defining Death, held in 1985 under the auspice of the Muslim Association for Medical Sciences at Kuwait at 1985, http://www.islamset.com/arabic/abioethics/death/index.html

any reason. These causes should be confirmed by necessary diagnostic means.

(c) The coma should last for not less than six hours.

(d) The person should not show any attempt of spontaneous breathing.

There are preconditions for the diagnosis of complete and irreversible cessation of brain functions, including brainstem functions. They are as follows:

(a) Deep coma with a complete lack of consciousness and responsiveness.

(b) Clinical signs of brainstem functions cessation, including the absence of pupillary, corneal, oculocephalic, vestibular, oropharyngeal, cough and vomiting reflexes.

(c) Lack of the patient's ability to spontaneous breathing during an intentional trial when the ventilator is stopped for a certain period.

Furthermore, all recoverable or reversible medical cases should be excluded. Examples are as follows:

(a) The patient should not be under the influence of sedatives, narcotics, toxins, or muscle relaxants. Body temperature should not be below 33 degrees Celsius. The patient should not be experiencing an untreated cardiovascular shock.

(b) Metabolic or glandular disorders that can lead to a coma should be excluded.

(c) A total cessation of brain functions should be confirmed throughout the observation and treatment period. This period differs as follows. It lasts for 12 hours beginning with the irreversible coma diagnosis. It lasts for 24 hours when the cause of the coma is a complete cessation of blood circulation (like what happens when the heart stops, for example). It lasts for 72 hours for children under two months; after the period ends another EEG or brain-related blood circulation tests are in order. It lasts for 24 hours for children between the ages of 2 months and 12 months; after the period ends another EEG is required. Children over the age of 1 year are treated like adults.

David Gallimore proposes additional precocious measures which include identification of history or physical examination findings that provide a clear etiology of brain dysfunction, exclusion of any condition that might confound the subsequent examination of cortical or brain stem function, performance of a complete neurological examination including the standard apnea test and 10 minute apnea test, assessment of brainstem reflexes and clinical observations compatible with the diagnosis of brain death. He further emphasized repetition of clinical assessment of brain stem reflexes in addition to finally providing certification for brain death documentation.

## 4.2. Characteristics of the team authorized to report brain death:

(a) The team should consist of at least two specialist physicians experienced in diagnosing cases of brain death. It is preferable to consult a third physician specialized in neurological diseases when needed.

(b) At least one of the two physicians should be a specialist in neurology, brain surgery, neurosurgery, or intensive care.

In order to prevent any possibility of passing a decision against the patient's interest, especially due to a conflict of interests, the following people should be excluded from the team.

(a) A member of an organ transplant team.

(b) A member of the patient's family.

(c) Anyone having a personal interest in announcing the patient's death (such as recipients of inheritance or wills).

(d) Anyone accused by the patient's family of professional malpractice against the patient.

# 5. Contemporary juristic views on removing artificial support devices.

Some contemporary jurists adopted the view that brain death is regarded as full death with all its legal and medical consequences including the distribution of the deceased estate according to rules of inheritance. This is the view of Mohammad Na'īm Yāsīn<sup>52</sup>, Ahmad Sharaf<sup>53</sup>, Mohmmad Mokhtār Al-Sulāmī<sup>54</sup>, 'Umar Sulaymān Al-Ashqar<sup>55</sup>, Māhir Ḥatḥūt<sup>56</sup>, 'Abdullah Sulaymān Manī'<sup>57</sup> in addition to the Fiqh Academy of the Islamic League<sup>58</sup>. They maintain that once man physically dies, the brainstem, heart, lungs stop working. He is then regarded dead even if he is on a respirator to keep the heart, lungs and other human cells functioning. It is permissible to extract a body organ and transplant it in another human body in countries which allow organ transplantation.

<sup>&</sup>lt;sup>52</sup> Yāsīn, Moḥammad Naʿīm, *Abḥāth Fiqhiyyah Ṭibiyyah Muʿāṣirah*, (Amman: Dār Al-Nafāʿis 1996).

<sup>&</sup>lt;sup>53</sup> Al-Duqr, *Mawt Al-Dimāgh*, p. 67

<sup>&</sup>lt;sup>54</sup> Al-Sulāmī, Moḥammad Al-Mokhtār, *Al-Ţibb fī Daw' Al-Īmān*, (Beirut: Dār Al-Gharb Al-Islāmī 2009), pp. 43-53.

<sup>&</sup>lt;sup>55</sup> Al-Ashqar, Umar Sulaymān, "Bah Bad' Al-Ḥaya wa Nihāyatiha," in *Dirāsāt Fiqhiyyah fi Qadāya Ṭibiyyah Muʿāṣirah*, (Amman: Dār Al-Nafā'is 2001), p. 105.

<sup>&</sup>lt;sup>56</sup> Maher Hathūt, *Al-Ahkām*, p. 168.

<sup>&</sup>lt;sup>57</sup> Al-Dhubyānī, Fahd, "Naz<sup>°</sup> Al-Ajhizah 'an Al-Mutawaffīn Dimāghiyyan," *Okaz*, 3402, 2/11/1431.

<sup>&</sup>lt;sup>58</sup> It was held in Amman, Jordan in 1986.

Another group of contemporary Muslim scholars adopted the view that brain death is not tantamount to death. All consequences of death cannot be based on it. However, the majority of those scholars permitted the removal of artificial support devices from persons who are proved to be clinically dead since it is proven irreversible in most cases. Those who adopted this view are the grand imam of Al-Azhar Jād Al-Haqq 'Alī Jād Âl-Haqq<sup>59</sup>, Tawfīq Al-Wā'ī<sup>60</sup>, Mohammad Sa'īd Ramadān Al-Būtī<sup>61</sup>, Badr Al-Mutwallī Abdul-Bāsīt<sup>62</sup>, Bakr Abū Zayd<sup>63</sup>, Abdullah Al-Bassām<sup>64</sup> and Mohammad Al-Mukhtār Al-Shinqītī<sup>65</sup>. The International Islamic Figh Academy-OIC<sup>66</sup>, an affiliation of the Organization of Islamic Cooperation, also holds the same view. This view is based on the fact that when one clinically dies, he is regarded to be in a state of dying. He cannot be regarded as fully dead before cell death occurs, where all decisive symptoms appear such as body relaxation, rigor and full blood circulation complete failure. dark spots on the dead body, facial lividity, absence of its expressions, open eyes and having dilated pupils.

A third group of scholars maintained that the life of a person who has brain death is similar to the life of the one who is slaughtered? A person in this case is partially regarded as dead. This is the conclusion of the Human Life Symposium <sup>67</sup>, sponsored by the Islamic Organization of Medical Sciences, Kuwait held in Rabī Al-Ākhar 1405 AH. Dr. Moḥammad Sulaymān Al-Ashqar was one of participants who maintained that artificial support devices can be removed from a clinically dead person. Moreover, some of the organs may be taken to be transplanted in other bodies. According to a later view of Al-Ashqar <sup>68</sup>, he confirmed that all rulings related to inheritance and the commencement on waiting period enjoined on a

<sup>&</sup>lt;sup>59</sup> Al-Duqr, *Mawt*, p. 155.

<sup>&</sup>lt;sup>60</sup> Islamic Association of Medical Sciences, *Al-Haya Al-Insāniyyah Bidāyatiha wa Nihāyatiha fi Al-Mafhūm Al-Islāmī*, (Kuwait: 1405AH), p. 461.

<sup>&</sup>lt;sup>61</sup> Al-Duqr, *Mawt*, p. 158.

<sup>&</sup>lt;sup>62</sup> Islamic Association of Medical Sciences, *Al-Haya*, p. 445.

 <sup>&</sup>lt;sup>63</sup> Al-Mukhtār Al-Shinqīţī, Mohammad bin Mohammad, Ahkām Al-Jrāha Al-*Ţibiyya wa Al-Athār Al-Mutratiba ʿalyha*. (Jeddah: Al-Şahāba 1994), p. 334.
 <sup>64</sup> Ibid, p. 334.

<sup>&</sup>lt;sup>65</sup> Ibid, p. 325.

<sup>&</sup>lt;sup>66</sup> It has been held in Makkah in 1987.

<sup>&</sup>lt;sup>67</sup> Islamic Association of Medical Sciences, *Al-Haya*, p. 429.

<sup>&</sup>lt;sup>68</sup> Al-Ashqar, Mohammad Sulaymān, *Abhāth Ijtihādiyya fī Al-Fiqh Al-Ţibbī*, (Beirut: Mu'assasat Al-Risālah 1422), p. 89.

widow can only start by complete death and the complete stopping of the heart. This view has been supported by Al-Manī<sup>69</sup>.

Contemporary Muslim jurists who maintain that brain death has all the consequences of normal death based their view on certain proofs as follows: 1) Human life ends when the body becomes unqualified to serve the soul or interact with it. Ibn Al-Qayyim said, "a moving alive light heavenly luminous body penetrating the essence of the [human body] parts, moving in the parts like the moving of water in a flower, like the moving of fat in an olive, and like the moving of fire in a coal. As long as these parts can receive surplus effects from this gentle body, this gentle body remains intertwined with these parts and sends these parts these effects, such as sensory perception and voluntary movement<sup>70</sup>." In case of brain death, the body cannot react to the soul or direct its organs to function properly for voluntary motions. Motions which may exist in certain bodies after brain death is not voluntary nor is it directed by the soul.

2. Muslim jurists maintained that a person is regarded as murdered when an instrument penetrates into his body. They did not enforce retaliation for those who may cause death for such person is regarded as dead once he ceases to move involuntarily. They further quoted Badr Al-Dīn Al-Sharkashī, "Stable life exists when the soul still resides in the body and still has voluntary motion. For example, one does not incur retaliation in case he cuts out the guts of a person while having an involuntary motion<sup>71</sup>."

3. Since the human brain is responsible for controlling all nerve centers and human consciousness, one dies once the brain dies. In this case all natural human life cannot function properly and a person is called dead from the medical and juristic perspectives. It is impossible to regain normal life again.

4. After great efforts, all physicians are unanimous to the effect that death of the brainstem is a state of death where man can never regain life afterwards. This is ultimately termed 'death' according to all physicians.

5. Keeping a patient under artificial life devices is contrary to the Sunnah of the Prophet. Husain b. Wahwah said that when Talhah b. al-Barā' (He was a youth from Medina who pleased the Prophet by his desire to do whatever he commanded) was ill, the Prophet came to visit him and said, "I cannot help feeling that Talha's death is near; so tell

<sup>&</sup>lt;sup>69</sup> Al-Dhubyānī, Fahd, "Naz' Al-Ajhizah 'an Al-Mutawaffīn Dimāghiyyan," *Okaz,* no. 3402, 2 (1431), p. 11.

<sup>&</sup>lt;sup>70</sup> Al-Mokhtār Al-Shinqīţī, *Aḥkām*, p. 352.

<sup>&</sup>lt;sup>71</sup> Al-Zarkashī, Badr Al-Dīn, *Al-Manthūr fi Al-Qawāʿid*, ed. Taysīr Fāʾiq (Kuwait: Ministry of Waqfs and Islamic Affairs 1958), vol. 2, p. 105.

me when it occurs and hasten the funeral preparations, for it is not fitting that the corpse of a Muslim should be detained among his family." (Mishkāt al-Maṣābīh, Hadith 101). Therefore, it is obliged to accelerate the funeral process by removing all artificial life support devices immediately after brain death. A patient cannot benefit from all those devices when the brain dies. In this case, it is similar to keeping a piece of flesh in the freezer<sup>72</sup>.

6. Saving the life of a patient from death is a communal obligation (*fard kifāyah*) which is the duty of the Muslim ummah in general. If a certain physician is particularly assigned to save the life of a certain patient, it becomes an individual obligation for this physician. He becomes then, sinful, in case he does not provide him with necessary procedures and means to save his life. In case it is impossible for all basic functions of the human body to work because of the malfunction of all nerve centers, such a person does not have life which is worth saving<sup>73</sup>.

Those who argued that brain death is not legally reckoned as death, based their view on the following arguments:

1. Both law and Islamic jurisprudence do not consider a person dead as long as the heart works. To regard someone dead, some legal consequences must follow such as registering the death certificate after the heart stops beating. Such is not the case of brain death. Earlier jurists maintained that breath is one of the signs of life. When the heart beats and one breathes, it means that he is still alive.

2. Muslim jurists established the major signs of death<sup>74</sup> so that one cannot be judged as dead except when the body is completely dead<sup>75</sup>. They maintained that in case of doubt on one's death, people must be assured before confirming his death. Ibn Qudāmah remarks, "In case there is doubt on a deceased's affair of life, consideration is given to

<sup>&</sup>lt;sup>72</sup> This is a comment made by Dr. 'Abdullah b. Sulaymān b. Manī' in response to a question which was raised to him by the Saudi Hear Association; cf. Fahd Al-Dhubyānī, "Naz' Al-Ajhizah 'an Al-Mutawaffīn Dimāghiyyan," *Okaz*, 3402, 2/11/1431.

<sup>&</sup>lt;sup>73</sup> Ibid, p. 172.

<sup>&</sup>lt;sup>74</sup> Nizām Al-Dīn Al-Balkhī, *Al-Fatāwa Al-Hindiyyah* (Beirut: Dār Al-Fikr 1310), vo. 1, p. 154; Ibn 'Abidīn, *Radd Al-Muḥtār*, vol. 1, p. 189; Al-Kharshī, Moḥammad b. 'Abdullah, *Sharḥ Mokhtasar Khalīl* (Beirut: Dār Al-Fikr, n.d.), vol. 1, p. 37. Al-Nawawī, Abū Zakariyya Moḥiy Al-Dīn Yaḥya bin Sharaf, *Rawḍat Al-Tālibīn wa 'Umdat Al-Muftīn*, ed. Zuhayr Al-Shāwīsh (Beirut: Al-Maktab Al-Islāmī 1991), vol. 2, p. 98; Ibn Qudāma, Abū Moḥammad Muwaffaq al-Dīn b. 'Abdullah b. Aḥmad b. Moḥammad al-Jamā'īlī. *Al-Mughnī* (Cairo: Maktabat al-Qāḥira, 1968), vol. 2, p. 452.

<sup>&</sup>lt;sup>75</sup> Tawqīq Al-Wāʿī, *Ḥaqīqat Al-Mawt*, p. 475

the apparent signs of death such as relaxation of feet, breakup of palms, coldness of noses, expansion of his face skin and subsidence of cheeks. In case he dies suddenly, such as one who is shocked or when being killed at war or from a wild beast, or because of falling from the top of a mountain, we should wait for other signs to be assured he is dead. Al-Hasan said regarding one who is shocked, we must wait for three days before determining his death<sup>76</sup>."

3. Removal of artificial life support devices for one who had brain death is regarded as a violation of human life by not supporting him to continue his normal life. This is however countered by the fact that the removal of these devices is not a crime. Brain death is a termination of life. Human organs can live without the human, being alive. When those devices are removed, a physician is not able to prolong the life of a patient. Those devices only work for a dead person whose organs may work temporarily due to artificial means and devices<sup>77</sup>.

5. Complete loss of consciousness and feeling is not regarded as sufficient proof for death. This is further based on the Quran 18:9 where the companions of the cave lived for three hundred years losing consciousness. Such is the case of brain death where one does not have full feeling or consciousness due to brain malfunction<sup>78</sup>. However, this view is contended by the fact that loss of consciousness does not simply mean that one falls in into a state of coma. It means that one loses full control over voluntary motion of the body which is regarded a criterion for stable life.

6. Certainty cannot be overruled by doubt. The human life of a person who has brain death is certain. His death is a matter of doubt which can only be overruled by certainty<sup>79</sup>. However, this is argued by the fact that legal determinations are based on dominant probability. Utter certainty in this case is almost impossible. In many occasions of our real life we cannot base ourselves on decisive proofs of certainty. Otherwise, we expose many human interests to be lost. Moreover, brain death is not based on doubt. In numerous cases, physicians decisively proved that a person can never return back to life after having brain death. No human being can live for a second without appropriate minimum functions of the brain<sup>80</sup>.

7. Before having a state of death brain all parties agree that the person enjoys normal life. According to the Islamic legal maxim, the norm is that the status *quo* remains as it was before unless it is proven to have

<sup>&</sup>lt;sup>76</sup> Ibn Qudāmah, Al-Mughnī, vol. 2, 337.

<sup>&</sup>lt;sup>77</sup> Ibid, p. 176.

<sup>&</sup>lt;sup>78</sup> Tawfīq Al-Wā'ī, *Ḥaqīqat Al-Mawt*, p. 473.

<sup>&</sup>lt;sup>79</sup> Bakr Abū Zayd, *Fiqh* p. 232; Tawfīq Al-Wāʿī, *Ḥaqīqa*, p. 478.

<sup>&</sup>lt;sup>80</sup> Al-Mokhțār Al-Shinqīțī, *Aḥkām*, p. 353.

changed, "*al-aşl baqā*' *mākān* '*alā mākān* ''*hattā yaqūm ad-dalīl* '*alā kilāf*''. This is further emphasized by the sub legal maxim, "The fundamental principle is to ascribe an event to its nearest point in time" (*al-aşl idāfat al-hādith ilā aqrab aw-qātih*). Therefore, life is presumed to continue even after brain death as long as we do not have a stronger proof to prove otherwise<sup>81</sup>.

8. Brain death is ascertained by specialized diagnosis which is apt to human error. Therefore, brain death needs to be diagnosed through a special professional team of physicians which is not available in many hospitals. Preserving human life necessitates the blocking of all avenues that may ultimately or probably lead to evil, i.e. error in assessing the life of a human being. This is proved through real cases and incidents which occur daily at hospitals<sup>82</sup>. According to Dr. Ali Al-Bārr, "500 people die per year in Britain while physicians confirm that that cause of their death is the stop of their heart and blood circulation. Despite the great advancement in medicine 4000 people were not included or diagnosed with brain death <sup>83</sup>."

9. In case we admit the fact that brain death is regarded as complete death, it may open the avenue of evil by allowing certain doctors to accelerate procedures to remove artificial life support devices to remove certain parts of the body to sell them or donate them for others. However, some scholars argue against this by maintaining that the means which may lead to evil are of three types. Some means may ultimately lead to evil, others do not ultimately lead to evil while a third category may lead to evil according to dominant probability.

## 6. The Most Preferred View on the Ruling of Removing Life Support Devices from those with Brain Death

Frist of all as Sachedina concludes, "pain-relief treatment or withholding or withdrawing of life-support treatment, in which there is an intention of allowing a person to die when there is no doubt that their disease is causing untreatable suffering, are permissible as long as the structures of consultation between all the parties concerned about the wellbeing of the patient are in place.<sup>84</sup>"

Removing life support devices from a person who is brain dead is permissible. To this effect, decisions were issued by the Fiqh Academy of the Islamic League, the International Islamic Fiqh Academy – OIC and the Symposium on Human Life. This is the genuine and correct

<sup>&</sup>lt;sup>81</sup> Bakr Abū Zayd, *Fiqh*, p. 232.

<sup>82</sup> Ibid.

<sup>&</sup>lt;sup>83</sup> 'Alī Al-Bārr, *Al-Ḥaya*, p. 432.

<sup>&</sup>lt;sup>84</sup> Sachedina A. End-of-life: the Islamic view. Lancet. 2005 Aug 27-Sep 2; 366(9487):774-9. doi: 10.1016/S0140-6736(05)67183-8. PMID: 16125596.

view given the fact that medication is not obligatory in all cases. Rather, it is subject to the five categories of the Shari'ah rulings. It is only obligatory when it is known to be a cause for the patient survival, the survival of his organs, or to protect the patient or the society from real harm. In addition, medication has to be provided through a safe means of treatment. This is the view adopted by those who banned organ transplantation such as Jād Al-Haqq 'Alī Jād Al-Haqq (former Grand Imam of Al-Azhar -May Allah have mercy on him). He stated that it is forbidden, from the perspective of Sharī'ah, to cause pain to a dying patient using any tools or medicines once it becomes evident to the specialized doctor that all these attempts are absolutely futile, and that the patient is facing certain death<sup>85</sup>.

Gristina GR, Baroncelli F, Vergano M. argued that "physicians who refuse to take part to WHLST or WDLST, for their part, should not use their choice as a passive solution to disregard the clinical problem of a patient who is suffering from an indefinite prolongation of the dying process.<sup>86</sup>"

This is the view adopted by the Permanent Committee for Scholarly Research and *Ifta*<sup>7</sup> in the Kingdom of Saudi Arabia which stated that if the dying patient arrives at the hospital as a deceased, there is no need to use any artificial life support devices<sup>87</sup>. In addition, if the patient's condition is unresponsive to artificial life support devices (such as when the patient suffers critical mental inactivity, an incurable disease and death is certain, a chronic disease in an advanced stage, untreatable brain damage, repeated cardiac or respiratory arrest, or resuscitation is useless for the patient in a specific situation...), there is no need from the perspective of Shari'ah in such cases to use resuscitation devices if three competent and specialized doctors so decide. The opinion of the patient's guardians to use or remove life support devices is not considered because they are not specialized<sup>88</sup>.

As for the time of removing these devices, the study prefers the view of Dr. Hatem Al-Haj in his *Al-Mustajaddāt al-Ţibiiyyah* that "…transfer the one with a dead brain to the operating room and remove the life support devices —which is agreed on by Fiqh Academies— and then wait for the patient's heart to stop functioning, to then declare his death<sup>89</sup>." This view is preferred as it compromises

<sup>&</sup>lt;sup>85</sup> Jād Al-Haqq, Jād Al-Haqq 'Alī, *Buhūth wa Fatāwa Islamiyyah fi Qadāya Mu 'āşirah* (Caior: Al-Azhar University, 1994), p. 508.

<sup>&</sup>lt;sup>86</sup> Gristina CR, et al, "Forgoing life-sustaining treatments," p. 762.

<sup>&</sup>lt;sup>87</sup> Permanent Committee for Research and Iftaa, Saudi Arabia, Fatwa no. 1286 on 30/6/1409.

<sup>&</sup>lt;sup>88</sup> Ibid.

<sup>&</sup>lt;sup>89</sup>Ibid.

different juristic views on this point and adopts the most agreed upon view. However, it should be noted that certain accurate diagnoses must be considered when judging brain death, which are outlined below.

## 7. When to state the Patient's Death and who is the One Responsible to Remove Artificial Life Support Devices?

The Study stated that the most preferred view is the permissibility of removing artificial life support devices from the moment doctors decide that the patient's brainstem has totally stopped without any hope of recovery. Afterwards, doctors should wait until the heart stops beating in order to put the death Shari'ah procedures into effect. The question now is: can we consider the patient as dead from the moment of removing devices or from the moment his heart stops? Also, who is responsible to make the decision to remove those devices: is it the patient's guardians or the doctors? To answer these questions, we must review modern Muslim jurists' views on considering the one whose brain died as a dead, and then add a fourth view that we prefer.

The proponents of the first view state the permissibility of removing artificial life support devices upon the brainstem death. without ruling the legal death except after the soul leaves all organs of the body<sup>90</sup>. With this consideration, brain death is a sign for death, not death itself. If the competent doctor, who has no personal purposes, decides that the person cannot be cured, then it is permissible to remove the medical device. In such a case, the doctor does not stop the treatment that can cure the patient but stops a procedure of no benefit for the dying person. Moreover, it is good to say that it is better to remove the device in such case because it draws out painful moments of dying. However, the patient's death, that requires extra Shariah rulings such as inheritance, shall not be declared once the device is removed. Such judgment is issued after doctors are sure that spirit has left all organs of the body. This case is a form of Tab id al-Ahkām (parceling out of the ruling of one case) which has several examples in the Sharī ah<sup>91</sup>. The Figh Academy of the Islamic League did not consider brain death as a sufficient cause to declare death. Rather, the cessation of one's heart and blood circulation is necessary to put death Sharī ah rulings into effect<sup>92</sup>. Holders of this view put two conditions for the removal of life support devices<sup>93</sup>:

First; the patient's condition is hopeless as there is no hope for recovery, and that he will live no more than some with these devices

<sup>&</sup>lt;sup>90</sup> Al-Hajj, Athar, p. 283.

<sup>&</sup>lt;sup>91</sup> Abū Zayd, Fiqh Al-Nawazil, vol. 1, p. 236.

<sup>&</sup>lt;sup>92</sup> Ibid.

<sup>&</sup>lt;sup>93</sup> The Islamic Fiqh Council session held in Makkah in 1408.

withheld. This decision is left totally for doctors to take. The Fiqh Academy of the Islamic League stipulated that this decision should be made by a committee composed of three expert and specialized physicians. The doctors' decision should include a statement that all the functions of brain have been permanently disrupted and that this disruption is incurable. The International Islamic Fiqh Academy added another condition that the brain should have started to decompose. As for Sheikh Bakr Abu Zayd, he stated that the decision of the doctor, who is competent and has no personal purposes, should state that the patient's condition is hopeless.

Second: The case when there is a need to remove devices. This need is of two forms:

- When life support devices are given to this patient whose brain has died, but another patient is more in need for these devices as he is expected to recover, or he is still demonstrating full life.
- When the expenses required for continuing resuscitation is financially harmful for the total treatment level of other patients, such as in the case of financially weak countries. According to the proponents of this view, if there is a need to remove devices, it is permissible to do so, and the decision is left for doctors to take. They can either keep the patient with the devices or remove them.

According to this view, the time of death is determined by the time when the heart stops beating, and the responsibility of doctors is just to state this case. The responsibility for device removal is for the parent's guardians and the decision shall only be based on a threeexpert-committee. The patient's opinion is not to be taken as it is should be based on deep consideration.

### 8. Conclusion

It is an obligatory matter from the perspective of Sharī'ah to use artificial life support to save lives of those who suffer temporary crises by bringing them back to their full consciousness, so as to prevent the death of brain cells by providing them with blood and oxygen on which their lives depend, that is, to ensure that they continue to perform their basic and vital functions. This is because the continuation of the patient's life in this case, the stage between clinical death and brain cell death, which takes only a few medical minutes, is not a matter of bringing him back to life, because he is still alive in the sight of Sharī'ah. On this basis, it is not permissible for a doctor to remove these devices before the brainstem dies, otherwise this would cause a real and irreversible death of the patient. It is permissible to remove artificial life devices once the death of the brain is ascertained in the light of the above-mentioned diagnoses. Then, the patient will be transferred to another room, but his death is announced only after the heart stops functioning. It is from this moment, the rulings of death are applied. The responsibility of removing these devices and declaring death is the work of a specialized medical committee that approves the diagnosis and issues a burial permit.

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