Islamic Law

BRAIN DEATH: THE CHALLENGES OF TRANSLATING MEDICAL SCIENCE INTO ISLAMIC BIOETHICAL DISCOURSE

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Abstract: Islamic ethico-legal assessments of brain death are varied and controversial. Some Islamic ethico-legal bodies have concluded that brain death is equivalent to cardiopulmonary death; others regard it as an intermediate state between life and death, and a few opine that it does not meet the standards for legal death according to Islamic law. Yet this translation of the concept of brain death into the Islamic ethico-legal domain has generated multiple ethical complexities that receive insufficient attention within the extant medical and fiqh literature. How do Islamic legists understand brain death as a clinical phenomenon? How does the Islamic ethico-legal system treat medical uncertainty? What Islamic ethico-legal principles should apply to bioethical questions about life and death?

In this paper, we analyze the arguments for, and against, the acceptance of brain death within the context of the deliberation of a representative juridical council. In our discussion we focus on areas in which the legists' ethico-legal reasoning hinges upon clinical conceptions of the state of the individual when diagnosed as brain dead. As Islamic ethics continues to engage scientific and technological advancements in these areas, such exploration of internal workings is necessary if we wish to better understand how Islamic ethical principles can contribute to bioethical deliberation.

Keywords: Brain Death, Fiqh, Islamic Law, Ethics, Bioethics, Medicine.

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BACKGROUND

Modernity and its technological advances have forced traditional cultures and value systems to compete for relevance within the “free market” of ideas. Nowhere is this more apparent than in medicine where science and technology have rendered fuzzy what had seemed to be clear categories of life and death. Although brain death as a clinical entity was first reported in Europe in the 1930’s, popularized in the United States in the 1960’s, and has subsequently been adopted in a variety of forms globally, Muslim societies and Islamic scholars continue to struggle with situating brain death within their ethico-legal framework.1,2

Beginning with the seminal debates on the acceptability of neurological criteria for death that took place in the Islamic Fiqh Academy of the Organization of Islamic Countries (OIC-IFA) in the 1980s, Islamic legists and Muslim medical experts have interpreted the primary sources and applied the ancillary tools of Islamic ethico-legal system (Shar‘iah) in order to interrogate the concept of brain death. Given that some form of neurologically-based criteria for ascertaining death is present in the legal statutes of many Muslim nations, one may believe that these efforts to make harmonious the relationship between an Islamic tradition and modern neuroscience have been successful.3

However, translating brain death into the domain of the Islamic juridical tradition raises multiple ethico-legal questions enmeshed with understandings of medical science. How do Muslim legists address, or ignore, medical uncertainties surrounding brain death in their ethico-legal analyses? Are the frames of debate constructed by the legists true to medical science? To date there has been scant attention paid to the complex translation of medical science into ethico-legal debates. Reasons for the lack of scholarly examination of these issues are numerous and unclear. For one, the authoritarian structure of, and paternalistic medical practice within many Muslim nations may contribute to power differentials between policy makers, medical experts, and Islamic legal

specialists that lead to palpable gaps in the discourse. Another reason may be that given the globalization of medical education where medical practitioners are predominately trained through medical curricula patterned on Western educational systems, Muslim physicians may see little conflict between the values of modern medicine and those of the Islamic tradition vis-a-vis brain death. Additionally, Islamic bioethical discourse suffers from a “silo problem” where medical practitioners, physician professional societies, academic Islamic scholars and traditional jurisconsults engage and attempt to reconcile value conflicts and ethical challenges with little cross-disciplinary input. As a result, published works of applied Islamic bioethics may not fully address such questions. Yet given the complex challenges facing medical practice, religious communities and governments, multidisciplinary engagement in bioethics is needed, and understanding the ways in which medical science is translated into the Islamic legal framework will provide insight into how to enhance the discourse so that it meets the needs of consumers be they Islamic scholars, Muslim practitioners or patients.

In this paper we highlight the debates around brain death within the Sunni Islamic ethico-legal tradition. We begin by providing a brief history of brain death and noting current trends and challenges within its definition. We then move to analyzing the Islamic ethico-legal debates for, and against, brain death. Throughout our analysis we highlight areas of potential ambiguity and inconsistency within the legal arguments that relate to medical science. These areas of uncertainty need to be addressed by future Islamic juridical councils so that a holistic understanding of brain death through the Islamic ethico-legal lens may be constructed.

DISCUSSION

Brain Death

History

Brain death was popularized in 1968 by the Ad Hoc Committee of Harvard Medical School. The committee’s charge was to determine the neurological characteristics of patients upon which sustaining life support was futile.


5 Belkin GS. Brain Death and the Historical Understanding of Bioethics. Journal of the
Importantly, they were not asked to consider which medical, religious, and policy experts should define death; rather their practical motivation was to outline a "new way of diagnosing death." Thus the lack of clarity on whether the criteria represent a new means of diagnosing death or a new definition of death continues to be a source of debate and critique. Nonetheless, this landmark report heralded the socio-cultural construction of a "brain dead" individual.

Another area of controversy revolves around how much organ transplantation considerations weighed upon the committee’s deliberations. While transplantation science was rapidly advancing at the time, and a prominent transplant surgeon was on the Committee, the report mentions organ transplantation only briefly. Committee member and historian Evert Mendelsohn and his student Gary Belkin note transplantation to have been a peripheral concern. Yet others cite Dr. Beecher’s, the committee chairperson, comments about hospitals having a paucity of organ donors for needy patients to support claims that organ procurement was a major motivation for the committee. Additionally, the use of the term "brain death" as opposed to "irreversible coma" is argued to have enabled the cultural acceptance of dissecting bodies for functioning organs. These opposing views may be reconciled in two ways; firstly, Dr. Beecher’s concern for facilitating transplantation could have been his own view and not the primary thrust of the entire committee. Secondly, Dr. Beecher held that brain death was the point at which continued medical therapy was wasteful, but also was the precise moment where the potential benefit to others through experimentation (read transplantation) became ethically appropriate. Hence the pragmatic utility of the brain death criteria validated the medical construction of a "brain dead individual," but the need for organ donors did not spawn it.

The messy history about which medical questions led to the creation of brain death as a clinical entity, and the still debated philosophical questions regarding brain death, are key to our examination of brain death through an Islamic lens. A lack of clarity in the West may, or may not, influence Muslim legists in their juridical assessments.


Variability of Brain Death Criteria

The Ad Hoc Committee advanced the concept of a brain dead individual as someone who demonstrates total unawareness to external stimuli, unresponsiveness to painful stimuli, absence of all spontaneous muscular movement, absence of spontaneous respiration, and no elicitable reflexes and described diagnostic means to ascertain whole-brain death. Other experts, most notably those in the United Kingdom, confine brain death to brain-stem death, restricting explicit diagnostic testing to the brain stem only. The advocates of brain-stem death argue that although the brain stem is not where consciousness resides it is “the brainstem (that) holds the critical nerve centers that make brain life possible...in the brain stem lie the structures that wake us up, the sensors that allow us to hear (and) sense touch (and) taste.”

In 1981 the United States (US) President commissioned a committee to standardize the legal definition of death that would be supported by the medical, legal and ethical communities. Accordingly the Uniform Declaration of Death Act (UDDA) was developed in collaboration with the American Bar Association, the American Medical Association and the National Conference of Commissioners on Uniform State Laws. The UDDA adopted a whole-brain criterion, signifying as dead any individual who has “irreversible cessation of all functions of the entire brain, including the brain stem.” However the act left unspecified the means of ascertaining whole-brain death allowing it to remain under the purview of the medical community.

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Even though the UDDA attempted to bring uniformity in the legal criterion of death, discrepancies between American hospital policies in brain death are substantial and the variability in practice standards is a cause for concern.\textsuperscript{15} Outside of the US the variability is even more prominent as there is no global consensus on which type of brain death, brain-stem or whole brain, should form the basis of clinical guidelines, nor on which diagnostic tests should be utilized for either formulation.\textsuperscript{3} For the purposes of the rest of the paper we will use the term ‘brain death’ to refer to whole-brain death and restrict our discussion of clinical criteria to those applied to adults.

\textit{Brain Death in the Islamic Tradition}

Within Sunni Islam, where religious authority is not vested in a single body, multiple opinions regarding the application of brain death criteria exist. Some juridical bodies consider whole brain criteria sufficient to consider an individual as legally dead, others accept the brain-stem criteria for this purpose, while a few believe brain death is not acceptable.

\textit{Muslim Juridical Councils' Opinions on Brain Death}

Various Sunni Islamic juridical councils took up the issues around brain death after the 1981 U.S. President’s Commission report.\textsuperscript{16} The discussions within these councils were largely framed by the pressing needs of organ transplantation. Hence, the validity or invalidity of neurological criteria for brain death were entwined with rulings on the permissibility or impermissibility of procuring organs from individuals whose respiratory and circulatory systems were stabilized with mechanical assistance.\textsuperscript{17} Illustratively, where Hanafi law is dominant in ethico-legal community, discussions on brain death are limited (the majority of Hanafi jurists do not accept organ transplantation as valid).\textsuperscript{18} To illustrate the multiplicity of rulings a brief review is presented below.

\textsuperscript{15} Greer DM, Varelas PN, Haque S, Wijdicks EFM. Variability of brain death determination guidelines in leading US neurologic institutions 2008; 70: Available from: http://www.neurology.org/cgi/content/full/70/4/284.


In 1981, the Religious Rulings Committee in Kuwait indirectly considered brain death impermissible by ruling that an individual remained alive as long as one's circulation and respiration continued even if mechanically assisted. Yet its neighbor Saudi Arabia viewed neurological criteria for death with less skepticism, and allowed brain dead individuals to be organ donors. Similarly Jordan accepted brain death in 1985. In a 1985 meeting of the Islamic Organization for Medical Sciences (IOMS) scholars declared that brain-stem death was an intermediate state between life and death and sanctioned removal of life support in this state. Importantly, they remained steadfast in considering legal death to occur only when cardio-respiratory function ceased. In 1988 The Islamic Fiqh Academy of the Organization of Islamic Conference (OIC-IFA) judged whole-brain death to be legal death stating that death occurred when all vital functions of brain ceased irreversibly and the brain started to degenerate.

Islamic juridical councils in South Africa had conflicting opinions in 1994. The Majlis al-Shura al-Islami in Cape Town considered an individual who is brain dead to be dead according to Islamic law. Yet the Majlis al-Ulama in Port Elizabeth ruled that organ procurement from brain dead individuals is akin to murder. In 1995 the United Kingdom's Muslim Law Council ruled that determining criteria for death is the domain of medical professionals and brain stem death is sufficient to consider individuals dead for the purposes of organ procurement. Similarly, the Indonesian Council of Ulama have stated that legal death occurs when the brain stem ceases to function and irreversible breakdown of heart and lungs has begun.

With consideration of these varied rulings an Islamic consensus on brain death is lacking. Some equate brain death to cardiopulmonary collapse, both being ethico-legal death. Others hold brain death to be a state between life and death

22 Ebrahim AFM. End of Life Issues: Making Use of Extraordinary Means to Sustain Life. In: Fadel HE, Khan MAA, Mishal AA, editors. Geriatrics and End of Life Issues: Biomedical, Ethical and Islamic Horizons: Jordan Society for Islamic Medical Sciences
where life support need not be continued, and still others reject the concept as ethico-legally unacceptable. Further confusing the issue is the lack of consensus, and at times clarity within council writings, on which neurologic criteria—whole brain or brain-stem—is accepted or rejected.

In the next section we aim to highlight tensions within Islamic ethico-legal reasoning with regard to brain death. We use the OIC-IFA debates as representative of the juridical councils for our analysis as the OIC-IFA is widely cited in the medical literature for Islam’s support of brain death and the discussions are captured in an accessible form for a medical audience. Before this analysis a brief overview of the clinical state described by brain death is necessary, as proper conceptualization of the clinical state is essential to ethico-legal framing.

**Brain Death: A Misnomer?**

Brain death is defined as the *irreversible* loss of *all critical functions* of the brain. Ascertaining the presence of such a state rests upon three principal abnormalities: (1) severe coma of known cause, (2) absent brainstem reflexes and (3) sustained lack of spontaneous respiration. From attributing the coma to a known cause, to testing brainstem reflexes and conducting spontaneous respiration trials, each diagnostic test has an inherent error rate. Hence clinical policies often recommend confirmatory testing. These confirmatory tests include testing for brain wave activity via electroencephalograms (EEG), ascertaining blood flow to the brain via doppler ultrasonography or radioisotope studies, and conducting further brain response tests through brainstem auditory evoked potentials or motor and somatic evoked potentials. In addition some centers mandate repeated exams at various time intervals to ensure correct a diagnosis. However, as with all empirical observations, none of these tests are 100% sensitive and specific.

**Critical Functions of the Brain**

The scientific community has demonstrated that some residual brain function may be present in individuals classified as brain dead. For example, the pituitary gland may continue to release hormones, the hypothalamus may continue to regulate body temperature, in response to surgery, blood pressure

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regulation may be intact, and some brain dead patients have demonstrated a breathing response.\textsuperscript{26, 27} Extreme examples include the ability of brain dead women to undergo labor.\textsuperscript{28} As one expert has noted "there is...likely to be persisting function in some...proportion of the brain" in those classified as brain dead.\textsuperscript{25} Therefore, the current ability to diagnose brain death represents an estimation of complete cessation of \textit{vital} brain functions without absolute certainty. These residual functions must therefore be non-vital at least according to medical experts.

Furthermore, in other conditions involving severe neurological impairment such as persistent vegetative state (PVS), recovery of consciousness has occurred, and traces of brain activity in response to physician commands noted.\textsuperscript{29, 30, 31} Therefore technological improvements may facilitate a more accurate determination of which parts of the brain function, and which do not, when brain death occurs.

Brain death formulations require that all \textit{critical} functions of the brain cease, however, deciding which functions of the brain are critical to assess remains controversial. Some experts cite brain-stem functions as the critical functions of the brain while others argue for testing of the parts of the brain associated with cognition and personhood.

\textit{Irreversible Loss of Brain Function}

Aside from conceptually and clinically deciding upon the \textit{critical} functions of the brain, challenges also arise with respect to applying the criterion of \textit{irreversibility}. Since brain death generally leads to withdrawal of life support or at least limitation of care, a natural history of what is the final clinical state of brain dead individuals is wanting. While we do know that the prognosis

\textsuperscript{26} McCullagh P. Brain Dead, Brain Absent, Brain Donors: Human Subjects or Human Objects. West Sussex: John Wiley & Sons Ltd; 1993.
of those who are declared brain dead is abysmal; that none will likely ever recover any semblance of consciousness, we do not know if certain functions of the brain may return.

It is also important to note that while certain brain functions may continue or return within brain-dead individuals, brain death appropriately signifies patients who have an infinitesimal, if not nil, chance of recovery to a conscious state. The best medical evidence reveals that if brain dead persons are continued on maximal life support they will suffer cardiopulmonary system failure within days to weeks. In conclusion, brain death is a misnomer because the criteria do not conclusively signify that the entire brain and all its functions are lost irreversibly (dead). More appropriately, brain death is a prognostic, and not a diagnostic, entity.

It is unclear how Muslim ethicists, and the Islamic tradition, tie death to brain functions and whether persistence of function in some parts of the brain are important to consider when defining death. Given that death is theologically tied to departure of the soul, and that in the Islamic tradition the presence of the soul is manifested by certain physical and mental abilities, a more robust explication may be possible. As of yet however there seems little conceptual clarity offered by available English language literature. It is unclear how Muslim legists, and the Islamic tradition, tie death to brain functions and whether persistence of function in some parts of the brain are important to consider when defining death. Some scholars analogize brain death to beheaded individuals suggesting that Muslim jurists equate brain death with total and irreversible brain failure. Given the possibilities of residual function in some parts of the brain such analogies may not accurately represent the state of medical knowledge and it is unclear if different conceptions of clinical state described by brain death would influence Islamic ethico-legal assessments.

This concern with the legist understanding of the concepts has basis in Islamic ethics itself. The legists have long noted that in order to determine the ethical value of act, the jurisconsult must form an accurate conceptualization of the act itself. In the jargon of the legist, this basic principle is captured in the maxim, "the ethical value of a matter is predicated on its (sound) conceptualization" (hukm al-shay' far' tasawwurih).
ISLAMIC ETHICO-LEGAL TENSIONS

Certainty of Medical Testimony

As we have seen explicitly in the OIC-IFA ruling jurists noted brain death was acceptable within Islamic law when “all vital functions of brain cease irreversibly and the brain has started to degenerate.”24 Similar councils require multiple physicians to corroborate the diagnosis of either brain-stem or whole brain death before declaration of death. These statements reflect the delegation of ascertaining death to the medical profession as jurisconsults welcome medical testimony on the meaning of brain death. However the question remains: what level of certainty do Islamic scholars require of medical experts?

The degree of certainty that is required from experts who determine matters of medical and scientific fact is contested in Islamic ethical theories and contextual considerations weigh heavily in the debates. The epistemological approach that prevails across the Sunni Islamic ethico-legal schools is that determinations that are established on the basis of a “preponderance of supposition” (ghalabat al-zann)—i.e. that are probabilistically established—are acceptable: absolute certainty is not required. In fact, summing up the position of his fellow legists, an eminent 13th century authority, ’Izz al-Dīn Ibn ’Abd al-Salām, noted that the “majority of the determinations of the Islamic ethico-legal system (sharīʿah) are based on probabilistic conclusions (zunūn).”32 Thus, with respect to biomedicine, the absence of certainty in medical experts’ conclusions does not itself pose a problem for the legists ethical determinations. However some legists hold that, in order to overturn normative prohibitions, or in order to establish capital punishments, a higher degree of certainty may be required than that which is required in order to establish the existence of defects in merchandise. The proceedings of the OIC-IFA offer insight into the debate around acceptable levels of medical certainty.

The scholars who accepted brain death as permissible argued that the ultimate determination of what constitutes death fell within the realm of ethico-juridical discretion (ijtihād). They noted that no clear textual evidence (nass) within the Islamic legal source-texts, or tacit consensus amongst the legal scholars (ijma al-sukti) about the moment of death held sway over when death occurred; thus death is determined by guidelines of medicine and customary practice. Since

medical scientists are experts in ascertaining physical signs of death, whatever is deemed acceptable by medical standards should be accepted within Islamic law. Further as medical science is probabilistic only dominant probability (ghalabat al-zann) about the moment of death is necessary to substantiate legal death.

Proponents of this argument found support in the historical record of Islamic law. Looking to the discussions concerning criminal liability for a death caused on the battle-field they found that criminal culpability decreased if the assailant killed someone who was already in an advanced state of injury bordering on death. Such a state was deemed unstable life (hayat ghair al mustaqirr) and was traditionally determined by (medical) expert testimony.

Thus if medical specialists testify with preponderant probability that the vital functions of the brain have irreversibly ceased then continuing life support is not obligatory and such a state is satisfies legal death in Islam.

Legists opposing brain-stem death at the OIC-IFA conference invoked secondary sources and legal maxims (sing., qāʿida) within Islamic ethico-legal deliberations for support. They cited the doctrine of the presumption of continuity (istishāb) and argued that a brain-dead individual must be considered alive until definitive proof of death was provided. They invoked a widely accepted ethico-legal maxim, “certainty is not eroded by doubt” (al-yaqin la yuzalu bi al-shakk), that is associated with this doctrine. Since most schools of Islamic law held respiration and evidence of heart beat as proofs for life a new definition or criterion for death required certainty to overturn these standards. Practically brain death was not acceptable as ethico-legal death, however life support may be removed upon this diagnosis. Death was held to occur upon cardiopulmonary collapse. These scholars felt that medical uncertainty around what signifies brain death rendered a new definition of death invalid.

While a debate on the level of medical certainty required for a new formulation of legal death did occur at the OIC-IFA, several issues were left unaddressed. Specifically, was probabilistic certainty needed about the prognosis of brain dead individuals, or was it needed for diagnosing the cessation of all brain activity? Did scholars consider the lack of medical consensus on clinical

protocols for brain death diagnosis as important? In order to properly apply juridical rulings more clarity is needed.

Which Sources and Principles Frame Brain Death Arguments within Islamic Law?

Proponents of Brain Death

After arguing that physicians need only dominant probability when declaring a person dead, acceptance of their testimony that brain death was death proper became a formality. The jurisconsults shifted scope to be concerned with the moral considerations and obligations attached to brain dead individuals. Often cited within this discourse is the Qur'anic verse “...and whoso saveth the life of one, it shall be as if he saved the life of all mankind (5:32).” Using this verse as a basis, proponents of organ transplantation created a Qur'anic mandate to exert all effort to save another's life. The introduction of a communitarian ethic into the juridical processes bears similarity to the manner in which the Christian concept of *agape* was used within the Protestant Christian community to facilitate organ donation. Recourse to this communitarian ethic was buttressed through appeal to a secondary source of law in Islamic ethics known as *istislah*. The doctrine of the consideration of interest (*maslaha*) allows for the explicit introduction of the aims of law (*maqāsid*) into the law-discovery processes. The types of interests (*masalih*) whose considerations can enter into law-discovery processes are divided into three classes: essentials (*daruriyyat*), needs (*hajjiyat*) and cosmetics (*tahsiniyyat*). The essential objectives are five in number: the protection of life, the protection of religion, the protection of property, the protection of lineage, the protection of intellect/sanity. Some legists added the protection of dignity as a sixth essential. The four schools of Sunni law accept the consideration of *maslaha* in order to protect the essentials (*daruriyyat*).

Proponents of brain death note that saving life is promoted by the Qur'an. Hence securing life should be the primary consideration during deliberation.

around brain-death. Brain dead individuals, they argue, will never regain consciousness and thus physicians need not continue life support. However, there may be some benefit to be had from the still working organs of brain dead individuals, so we should procure these organs for societal benefit. Since, individuals are custodians, and not owners, of their bodies, there was less reticence to prioritizing community benefit over body sanctity. On the basis of considerations of public benefit tacit approval for the brain dead state occurred. Subsidiary principles such as the living take precedence over the dead, and securing benefit is prioritized over removing harm, further strengthened this argument.

It is important to note that physicians are integral to the each step in the process. Medical experts are given leave to define a new analogue of traditional cardiopulmonary death, are absolved of continuing life support they deem futile, and based on their calculation of benefit to others from the still functioning organs in brain dead individuals are allowed to continue life support to procure said organs. This is consistent with the legist’s respect for the conclusions of experts (ahl al-khibrah) within their domains.

While appealing, such an argument is not without its problems. The consideration of maslaha in the law-discovery process is governed by conditions. Firstly the benefit must be genuine, conjecture at potential benefit is not sufficient for its use. Thus there must be a reasonable probability that benefits outweigh harm. The question about brain death then becomes a more specific one---would a particular organ be of definitive benefit to a particular recipient? As each organ is different in terms of rejection rate, longevity, survival and quality of life benefits, complex granular questions ensue. Furthermore, successful transplantation requires lifelong medications that have their own risks and benefits and are costly. Are we benefiting a particular (fiscally privileged) segment of the population as opposed to the whole? A further question thus issues forth: Should maslaha be restricted to a general category of organs or should contextual details be used when applying this legal principle to a particular case? Since, one effective cause for accepting brain death in Islamic law lay in its tie to organ transplantation; this is an important distinction to address.

Lastly, the proposed benefit secured by considering maslaha must not conflict with a principle or value that has been explicitly stated in the legal source-texts or upheld by scholarly consensus (‘ijma). This final condition may not
be fulfilled either. Just as the Qur'an equates saving one life as saving all of mankind, it equates the killing of one life to the murder of all mankind. In the context of declaring individuals as brain dead a particular criterion of death is applied to individuals who may serve as organ donors. Unfortunately when respiration ceases and the heart stops the body’s organs quickly decay leaving them unusable for organ transplantation. If organs were not needed one could allow brain dead individuals to be declared dead by cardiopulmonary criteria. Thus the choice of which criteria to apply when declaring death is based on a particular posited benefit. Some argue that this practical use of rulings quickens a diagnosis of death for some incorrectly. This was the view held by the Majlis al-Ulama in Port Elizabeth when they declared organ procurement from brain dead patients akin to manslaughter.21

Detractors of Brain Death

As mentioned above, the detractors of brain death as legal death used the principle of istishab as a basis for their argument. Istishab, one of the secondary sources of Islamic law, declares that facts or rules of law that have been proven to exist, or not-exist, remain valid until evidence determines a change has occurred. Hence the state of marriage is presumed to continue until a definitive declaration of divorce is noted and a missing person is assumed to be alive when gone missing. The presumption of continuance presumes things are in their natural state of existence and is operable when the higher sources of law fall silent. Hence it is called the “last ground of a fatwa.”33 All four Sunni schools of law recognize the validity of istishab to further the presumption of original presence (al wujud al asli).33 Using this principle one could argue that since death here is not definitive, i.e. that while brain death patients eventually die the time period for expiration varies, one should presume the original presence of life until clear evidence of the physical manifestation of death occurs. A hint of this cautious approach was seen in the IOMS declaration where removing life support from brain death patients was allowed but legal death declared only when cardiorespiratory function ceased. Further bolstering an Istishab-based argument is the legal principle of al yaqin la yuzulu bi shakk, certainty is not eroded by doubt. Here one could argue that since brain death is a doubtful state death must be ascertained through unequivocal and certain means.

Additional arguments advanced by dissenters included those based on the concept of sanctity (hurma) of the human body. Used effectively by
Mufti Muhammad Shafi, the late Grand Mufti of Pakistan, against organ transplantation he argued that the human body deserved respect and should not be violated after death. The concept of *hurma* is well substantiated within the source-texts and is founded on *hadith* where the Prophet noted breaking the bones of dead persons to be reprehensible and forbade mutilation of dead bodies. By disallowing organ transplantation an effective cause for categorizing individuals as brain dead was removed. The duty to maintain life support for those individuals who were brain dead was likewise a non-issue. Medical care is not unequivocally mandatory to seek, nor obligatory to maintain, according to the majority of Islamic scholars, hence may futile life-support be stopped. Some scholars further note that when the body ceases to function on its own forcing it to persist is akin to causing harm, which is prohibited.37

Another stream of argumentation is grounded in the legal principle that removal of harm takes precedence over bringing of benefit. Here potential harms include an “early” diagnosis of death, impinging upon the dignity of the human body, organ trafficking, and others; the benefits did not seem to outweigh the harm for this group.

Inductive analysis of the primary source texts and the ethico-legal principles extracted from them outlines what might be called the “spirit” of the Islamic ethico-legal system, a spirit from which a further argument can be advanced. The classical jurists were very cautious in their approach to ascertain the occurrence of death as multiple obligations ensue once a person dies. Some examples include a communal obligation to perform the funeral prayer and burial with haste, the proper distribution of inheritance, and even a waiting period for the widow before she can marry, all ensue after death is declared. Given the importance of these matters to community life, classical legal manuals list palpable physical signs, such as rigor mortis, as indicators of death. If any doubt existed some jurists waited until the stench of body decay was present before commencing with burial and division of the estate.31 As noted previously, proponents of brain death advanced that these “classical” signs were based on probability. Yet, lost in translation within this argument is the ethos of the classical indicators. A cautious approach was the spirit of law when jurists chose indicators of death. While the specific criteria may have been the domain of the experts, the indicators chosen were recognizable to the

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37 Personal communication with Shaykh Khalil Abdur Rashid in June 2011 on the authority of Shaykh Muhammad Emin Er of Turkey
laity. Thus accepting brain death as legal death within Islamic law was seen as contrary to the spirit of the classical jurists.

These arguments against brain death are also not without flaws. *Istishab* presumes continuity of a state, yet a change of state has occurred: a person who was previously able to move willfully and breathe by oneself can no longer do so. Hence a continuity of state argument may not apply. Since by virtue medical science is probability-based, *zanni*, a certainty argument is also challenged. Thus principles such as certainty is not eroded by doubt, *al yaqin la yazul bi shakk* may be inoperable. As far as arguments for maintaining the sanctity of the human body after death this too can be questioned. Islamic courts have allowed for autopsies to ascertain causes of death and criminal negligence. Further the dissection of human bodies to retrieve objects of value to others such as the case where someone ingests gold belonging to another individual and then dies has been deemed permissible. Thus allowing for a separate standard of legal death [brain death] in order to obtain benefit cannot be denied on grounds of human dignity and body sanctity alone.

**SUMMARY**

Islamic juridical deliberations around brain death largely took place over twenty years ago and were variably framed by concerns of organ donation. As medical science and scientific evidence has advanced over the past twenty years, Islamic juridical councils need to reassess the validity of brain death as legal death according to Islamic law. The arguments offered to accept, or reject, a new definition of death need further refinement. Which Islamic legal principles are operative, and why, are not clear given the state of medical knowledge. In our reading of the position statements and *fatawa* many important questions remain inadequately addressed.

The Islamic experts who took up deliberation over brain death largely borrowed the *clinical* and *conceptual* definitions of brain death from the West. As these definitions have been transplanted in Muslim contexts, the Islamic rulings suffer from a lack of uniformity regarding the permissibility of brain death as legal death, or as an intermediate state between life and death. In order to meet the needs of Islamic bioethics consumers, i.e. Muslim physicians and patients and their advisors, renewed discourse around brain death needs to occur in a multidisciplinary fashion.
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