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Organ Transplantation in the United Arab Emirates: Legal, Ethical and Historical Aspects

by Eveline Schneider Kayasseh*

Abstract

Organ transplantation has recently been the subject of significant public policy attention in the United Arab Emirates (UAE). In May 2013, the first donated organ from a deceased person was successfully transplanted to a young woman with a damaged kidney. Although the first laws on organ transplantation were issued in the Arabian Peninsula in the late 1980s and legislation on organ transplantation has existed in the UAE since 1993, a national organ transplant programme was not started until 2007. Since then, transplanted organs have come exclusively from living, related donors. Mainly due to the absence of a definition of death in the relevant law, transplants from deceased donors were not performed. In addition, religious-ethical and socio-cultural concerns, such as the principle of inviolability of the human body and the significance and timing of death and burial, exert a strong influence on potential donors in the region. Some of these concerns are reflected in the UAE legislation, as well as in the laws elsewhere in the Arabian Peninsula. In order to implement these laws and promote the readiness of residents to commit to organ donation, governments have published the rulings of select religious-juridical scholars who deem organ donation compatible with Islam, and have started awareness campaigns that aim at breaking the ice regarding deceased organ donation.

I. A Brief History of Healthcare in the UAE

Until the beginning of large-scale oil exploration in the 1950s, the territory that now forms the UAE was a relatively isolated area known as the 'Trucial States'. Its people lived in subsistence economies and the main economic resource was pearl fishery. However, in the wake of the economic depression of the late 1920s and early 1930s, and the development of pearl cultivation by the Japanese, the pearling industry declined and was eventually destroyed. Already in the 19th and early 20th centuries, the Sheikdoms bordering the Persian Gulf had allied themselves with the British Empire in a series of maritime defence treaties ('Maritime Truces') and exclusive and non-alienation treaties. The consequence of the treaties was that these polities eventually ceded control over foreign affairs and defence to the Empire and were thus under British protection.¹ In fact, Britain had recognised very early on the strategic importance of the Gulf region as part of the trade route to its Indian colony and the need to preclude other European powers from establishing a presence in the Gulf. At the same time, the local rulers (Sheikhs) lacked the means to protect their domains without the support of an outside power. The coastal Arabs who occasionally raided British trading vessels headed to the Indian subcontinent were also a nuisance making it necessary to protect ships as well as British

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¹ N.J. Brown, *The Rule of Law in the Arab World*, Cambridge 1997 at 131; R. Said Zahlan, *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman*, London etc. 1989, 7 et seq.; D.D. Commings, *The Gulf States: A Modern History*, London 2012 at 72 et seq., 83.

subjects and British-protected persons, such as Indian pearl merchants and traders who resided in the Trucial States.² Because British officials did not consider the local courts capable of handling cases involving foreigners, Britain also assumed jurisdiction over – broadly speaking – all non-Muslim foreigners, including British subjects residing in the Trucial States, most of whom were Indian traders and pearl merchants under the protection of the British Government of India.³ In 1971, the formal British presence ended and the UAE was founded as a federation of six (later seven) emirates.⁴

The predominantly desert landscape but also the mountainous and maritime environments, made living conditions in the Trucial States harsh and the people generally had little external assistance in case of maladies. The geography of the country did however also contribute to the rich medical tradition of the UAE providing the medicinal herbs used by traditional healers. In addition to local Arabic and Islamic medical lore, medicinal traditions from countries including India, Iran, and East Africa also influenced the local medicinal traditions.⁵ Basically, there were two types of traditional medicine in the UAE: ‘natural’ folk medicine, based on herbs, minerals and traditional remedies such as the practice of cauterization (al wasm), which was the method of choice against almost any kind of malady.⁶ Cupping (al hijāma/al ḥajāmah)⁷, another traditional treatment, is still practiced today.⁸ The second type of medicine was based on magico-religious ceremonies and practices; e.g., the writing of Qur’anic verses on amulets to be worn by those affected by illness.⁹ It is interesting to note that lately, despite the availability of modern healthcare facilities, there has been a renewal in the demand for alternative medicine, especially in traditional herbal and natural cures.¹⁰

Before the advent of modernity, illness and the nursing of the sick was the responsibility of the extended family, which only turned to a muṭabbib (traditional healer) if a disease persisted or was unknown to the family elders. Medical plants and herbs were acquired at the al ‘ashshab’s (herbalist) shop. Childbirth was the responsibility of the female members of the family, who were assisted in this task by the al dāya (the midwife) who also cared for premature babies.¹¹ However, until the first modern medical facilities opened in the region, many women died during or shortly after childbirth. Malaria, tuberculosis, intestinal parasites and eye infections were also widespread.

² See *Commings*, supra note 1 at 78 et seq.; *J. Onley*, *Britain and the Gulf Shaikhdoms, 1820-1971: The Politics of Protection*, Center for International and Regional Studies, Georgetown University School of Foreign Service in Qatar, Occasional Paper No. 4, Qatar 2009, 1–44 at 1 et seq.

³ Cf., e.g., *Onley*, supra note 2 at 15. – From the early 1930s onwards, a small group of British subjects staffed the Sharjah airport station, which was a stopover for Imperial Airways flying from England to India and (later) to Australia.

⁴ Abu Dhabi, Dubai, Sharjah, Ajman, Umm al-Quwain, Fujairah, and Ras al Khaimah (acceded to the union in 1972).

⁵ See *S.H. Hurreiz*, *Folklore and Folklife in the United Arab Emirates*, London 2002 at 106 et seq.

⁶ *F. Heard-Bey*, *From Trucial States to United Arab Emirates*, Dubai 2004 at 140; *Hurreiz*, supra note 5 at 109 et seq.

⁷ For further information regarding these techniques, see *S.A. Ghazanfar*, *Handbook of Arabian Medical Plants*, Boca Raton 1994, 3 et seq.

⁸ See, e.g., *The National (UAE)*, 20 June 2012: „Alternative Medicine is Fine if the Spice is Right“, available at <<http://www.thenational.ae/news/uae-news/health/alternative-medicine-is-fine-if-the-spice-is-right>> accessed 15 February 2014.

⁹ *Hurreiz*, supra note 5 at 107, 112 et seq.

¹⁰ See *Hurreiz*, supra note 5 at 113; *The National (UAE)*, 20 June 2012: „Alternative Medicine is Fine if the Spice is Right“, available at <<http://www.thenational.ae/news/uae-news/health/alternative-medicine-is-fine-if-the-spice-is-right>> accessed 15 February 2014.

¹¹ See *Hurreiz*, supra note 5 at 108 et seq.

In the first decade of the 20th century, American missionaries, who eventually developed the Mason Memorial Hospital and the Marion Wells Thoms Memorial Hospital in Bahrain (their main base), began to visit the Trucial States. Although most of the missionaries were not medical doctors, they provided basic medical care for the native population. In the 1930s, when oil finds in Bahrain heralded the era of the oil industry, the British authorities restricted access to the coast out of fear that foreign subjects might approach the Sheikhs of the Trucial States on the subject of oil concessions. The result was that the Trucial States became largely inaccessible to the missionaries until after the Second World War. At the same time, the British started establishing very basic healthcare facilities.¹² In 1939, for example, on the initiative of the British government in India, a dispensary with a resident Indian doctor was opened in Dubai.¹³

Oil was discovered in the 1950s and from the early 1960s onwards, revenue from the production and export of oil improved living conditions. At the same time, the oil boom brought a large number of foreigners, mainly migrant workers, into the Trucial States. The diversification of the community soon showed that neither the existing legal framework nor the rudimentary health facilities could meet the demands of the ever increasing population and more complex society. While the first national healthcare laws were not issued until the 1970s,¹⁴ in 1951, still in the pre-oil era, the first hospital in the Trucial States, the Maktoum Hospital in Dubai, was built with the aid of the British. It was eventually upgraded and enlarged, and offered medical services until 2009. This hospital was run by a former doctor in the Indian army who, till 1964, also co-ordinated all the health services along the coast. In 1952, the Sara Hospital (named after the American missionary Sara Hosman) was opened in the Emirate of Sharjah. In 1960, on the initiative of Sheikh Shakbout bin Sultan Al Nahyan, the then-ruler of Abu Dhabi (reigned 1928-1966) and his brother and successor Zayed (reigned 1966-2004), the Oasis Hospital (al wāha hospital) was opened in Al Ain in the Emirate of Abu Dhabi. In 1963 another hospital was opened in the Emirate Ras Al Khaimah. In the following years a number of clinics were set up and touring doctors, who sent the more serious cases to the hospital in Dubai, were organised. In addition, after the British Development Office had assumed responsibility for health in the mid-1960s, vaccination campaigns were organised and existing healthcare facilities were upgraded.¹⁵ In 1968, the Central Hospital was opened in Abu Dhabi. Dubai's second-oldest hospital, the Rashid Hospital, was built in 1973. Since then the healthcare sector has grown considerably and currently, in addition to the government-funded hospitals, the individual Emirates have a growing number of private hospitals offering medical care. However, it wasn't until 2007 that the sole transplant program of the UAE, the transplant program at the Division of Transplantation and Hepatobiliary Surgery at Sheikh Khalifa Medical City in Abu Dhabi, was launched.¹⁶

¹² See *F. Al-Sayegh*, *American Missionaries in the UAE Region in the Twentieth Century*, *Middle Eastern Studies* 32 (1996), 120-139 at 125 et seq., 134.

¹³ *Heard-Bey*, *supra* note 6 at 320.

¹⁴ See below, section III.2.

¹⁵ *Heard-Bey*, *supra* note supra note 6 at 320, 325.

¹⁶ See the website of Sheikh Khalifa Medical City (Abu Dhabi), <<http://www.skmc.ae/en-us/medicalservices/SpecialistCare/Surgery/ServicesProvided/Pages/TransplantationandHepatobiliary.aspx>>, accessed 15 February 2014.

II. Juridical-Ethical and Socio-Cultural Framework

In the UAE, Shari'a has the status of a constitutional source of law and Islam is the official state religion.¹⁷ Although the expatriate community, which brought along their own customs, faiths and practices, outnumbers the native Emiratis by far,¹⁸ the majority of the inhabitants of the UAE are of Arab origin and Muslim faith.¹⁹ As a consequence, Emirati heritage, as well as daily life, is dominated by Arab culture and Islam.²⁰ Religious rules and principles, for their part, have heavily influenced medical traditions, including people's ideas and beliefs about health care issues, namely illness, suffering, and cures for diseases.²¹ Thus patients, healthcare professionals and indeed the legislation are the product of a culture inextricably intertwined with Islamic principles and concepts.

While operations similar to transplantation procedures have been known in the Arab world for quite a long time,²² organ transplantation is in its main features a scientific innovation of our times and as such not explicitly mentioned in the primary sources of Islamic law, the Qur'an and the teachings and practices of the Prophet Mohammad (the sunna). In cases such as this, Muslim jurists typically have recourse to analogical reasoning (qiyās) and personal interpretation and reasoning (ijtihād) in order to derive rulings from existing legal principles and general ethical concepts to then apply them to novel situations. Such juridical opinions, fatāwā (sing. fatwā), offer moral guidelines on whether specific actions or omissions in the secular and religious realms of a Muslim's life are Sharia compliant. However, there is no 'central' or pastoral authority in Islam and in principle, a follower of Islam may ask for the opinion of any religious scholar (mufti). Yet in some countries in the Middle East, fatāwā concerning particular matters may only be issued by designated state bodies and are then considered authoritative (endorsed by the government): In Saudi Arabia, for example, the influential Council of Senior Ulama is the only body that is authorized to issue fatāwā (these legal opinions usually have quasi-legislative effect);²³ in the UAE, only a fatwā center affiliated to the General Authority of Islamic Affairs and Endowments (GAIAE) may issue official fatāwā.

When considering the issue of organ transplants from a socio-cultural and religious perspective, issues such as the sanctity of the human body and life, death, as well as the Qur'anic prohibition of self-destruction have to be weighed against other fundamental principles of juridical-ethical value, such as the common good of society (maṣlaḥa) or the

¹⁷ Art. 7 UAE Constitution. – With the exception of Saudi Arabia, where the Qur'an and the Prophetic Sunna are declared to be the constitution, the same is true for the other countries in the Arabian Peninsula.

¹⁸ Only approximately one fifth of the total population of the UAE is citizens.

¹⁹ According to the Pew Research Center's Religion & Public Life Project, Pew-Templeton Global Religious Futures Project, The Global Religious Landscape, 76.9% of the population of the United Arab Emirates were Muslim in the year 2010. Available at <http://www.globalreligiousfutures.org/countries/united-arab-emirates/#/?affiliations_religion_id=0&affiliations_year=2010®ion_name=All%20Countries&restrictions_year=2011> accessed 15 February 2014.

²⁰ Amongst the four Sunni jurisprudential schools, the Maliki School of law usually prevails over the Hanbali, Shafi'i and Hanafi schools.

²¹ Cf. *Hurreiz*, supra note 5 at 106 et seq.

²² See *V. Rispler-Chaim*, *Islamic Medical Ethics in the Twentieth Century*, Leiden/New York/Köln 1993 at 28, 37; *M. Albar*, *Organ Transplantation: A Sunni Islamic Perspective*, *Saudi Journal of Kidney Diseases and Transplantation* 23 (2012), 817–822 at 818 et seq.

²³ Exempt from this rule are religious rulings that concern purely private matters.

principle of lesser evil. Other factors that have to be taken into consideration are the impact of tribal and familial relations on the decision-taking process regarding donation after death.

1. The Beginning of Life

The theme of life and the importance of life are highlighted in many instances in the primary sources of Islam.²⁴ In Islamic teaching, human life is one of the five principles underlying the law that must be protected.²⁵ It is commonly believed that the human body is transformed into a living being when the spirit or soul is infused into the growing foetus (ensoulment). Qur'anic passages and hadith suggest a gradual process of this genetic entity towards the physical and spiritual attributes of humanity. Based on traditions that address the exact time of ensoulment, Muslim scholars developed the concept that an embryo undergoes three major stages of development, each lasting 40 days, in which the embryo increasingly demonstrates human features. It is generally believed that after this process, which lasts 120 days, the soul is breathed into the embryo, which then attains human status.^{26 27}

2. The Human Body, its Organs and Donation

a) *The Human Body*

In Islamic tradition (as in other religious traditions), the definition of a person – and, by extension, her or his body – includes a religio-legal dimension.²⁸ Based on the Qur'an and Sunna, classical Islamic jurisprudence distinguishes between Muslims, 'people of the book' ('ahl al-kitāb, mainly Christians and Jews), and pagans or people belonging to other polytheistic religions, as well as sub-categories of persons (e.g., free men, slaves, women). Likewise, bodies are not mere organisms, but 'religious' bodies that belong to a Muslim, a Christian, a Jew etc.²⁹ According to Islamic teaching, human beings (and their bodies) have been created by God, who has ensouled each individual, who then act as his viceregents (khalifa) and servants ('abd) on earth.³⁰ Because God is considered the sole owner of everything he created, a human being is not the owner but merely a trustee of his or her body. On the one hand, this concept obliges individuals to take good care of the bodies entrusted to them, and on the other hand limits the freedom of action regarding one's own body, which, as God's

²⁴ See, e.g., Qur'an sura 5, verse 32: "[i]f anyone saved a life, it would be as if he saved the life of the whole people." – Translation from the original Arabic by A.Y. 'Ali, *The Meaning of the Holy Qur'an*, 11th ed., Beltsville 2009.

²⁵ Cf. W.B. Hallaq, *The Origins and Evolution of Islamic Law*, Cambridge 2005 at 145. See also Y.I.M. El-Shahat, *Islamic Viewpoint of Organ Transplantation*, *Transplantation Proceedings* 31 (1999), 3271–3274 at 3271.

²⁶ See Qur'an sura 23, verses 12-14, sura 32, verses 6-9. See also M. Holmes Katz, *The Problem of Abortion in Classical Sunni fiqh*, in J.E. Brockopp (ed.), *Islamic Ethics of Life: Abortion, War, and Euthanasia*, Columbia 2003, 25–50 at 30 et seq.; N. Fischer, *Islamische Positionen zum Pränatalen Leben*, Freiburg i.Br. 2012 at 30, 33, 42 et seq.; M. William, *Mensch von Anfang an?*, Freiburg 2007 at 50 et seq.

²⁷ According to minority views, life begins at 40, 42, or 45 days after conception. See D. Atighetchi, *Islamic Bioethics: Problems and Perspectives*, Dordrecht 2007 at 93 et seq.; A. Sachedina, *Islamic Biomedical Ethics*, New York 2009 at 131; William, *supra* note 26 at 58 et seq.

²⁸ In this regard, see R.D. Marcotte, *The 'Religionated' Body: Fatwas and Body Parts*, in E. Burns Coleman & K. White (ed.), *Medicine, Religion, and the Body*, Leiden/Boston 2010, 27–49 at 27 et seq.

²⁹ See M. Arkoun, *Rethinking Islam. Common Questions, Uncommon Answers*, Boulder 1994 at 99 et seq.; Marcotte, *supra* note 28 at 29. See also, e.g., Qur'an sura 3, verse 110, sura 9, verse 29.

³⁰ But the human being is not made in the image of God. See in this regard Qur'an sura 112, verse 4, sura 42, verse 11. At the same time, he and she enjoy a special status within the creation: Qur'an sura 17, verse 70; sura 50, verse 16.

creation, should not be altered,³¹ let alone destroyed.³² The inviolability and dignity of the body persist after death.³³ This means in particular, that the physical integrity and wholeness of a dead body must be respected and protected, i.e. that no body parts should be amputated or injured.³⁴ Furthermore, it is argued that because the dead body will be resurrected on Judgment Day, it should be neither cremated nor mutilated but buried promptly according to Islamic rites.³⁵ At the same time, Muslim scholars accept that a person has some degree of general control over her or his body.³⁶ From the point of view of the individual living in a particular body, the modern trends of privatisation and commodification, as well as advances in the medical field, have motivated many among them to demand greater rights over their bodies in order to remediate medical conditions or alter their appearance by recourse to surgery.³⁷

Between the poles of everyday pragmatism and religio-legal tradition, the issue of organ transplant has been debated by Muslim jurists since the 1950s.³⁸ Whereas opponents of transplants have based their arguments mainly on the aforementioned arguments, such as the sanctity of the human body and the individual's trusteeship of the same, similarly based arguments have also been invoked to legitimise organ transplantation.³⁹ In practice, there is historic evidence for operations on dead bodies. For example, it was considered licit to operate on a human body in order to remove a certain object the deceased had swallowed prior to her or his death in order to return it to its rightful owner. Also, according to the Mālikī and Shāfi'ī schools of law it was lawful to remove a foetus that was considered alive from the womb of a dead woman in order to save the unborn child (the Ḥanbalī tended to disagree with this position).⁴⁰ Similarly, perhaps, those in favour of transplants argued that the needs of the living take precedence over those of the dead and that the juridical principle of 'necessity', which makes that which would otherwise be prohibited, lawful, could apply if an operation on a dead body would help save the life of someone who would otherwise die.⁴¹ However, in the case of a living donor, the benefit to the patient must be greater than the harm inflicted on the donor, whose health may not be adversely affected (principle of 'no harm').⁴² Furthermore, it

³¹ See *Sachedina*, supra note 27 at 168, 175 et seq.; *Marcotte*, supra note 28 at 35; *Albar*, supra note 22 at 819; *Atighetchi*, supra note 27 at 161.

³² See Qur'an sura 2 verse 195; sura 4, verse 29. Regarding suicide, see *J.E. Brockopp*, The "Good Death" in Islamic Theology and Law, in *J.E. Brockopp* (ed.), *Islamic Ethics of Life*, Columbia 2003, 177–193.

³³ See *M.Y. Rady, J.L. Verheijde & M.S. Ali*, Islam and End-of-life Practices in Organ Donation for Transplantation: New Questions and Serious Sociocultural Consequences, *HEC Forum* 21 (2009), 175–205 at 191.

³⁴ This view is partially based upon *hadīth* evidence. See Sunan Abu-Dawud, book 20 (*kitāb al-janā'iz*), *hadīth* 3201; *Rispler-Chaim*, supra note 22 at 76; *Atighetchi*, supra note 27 at 161, 163; *Marcotte*, supra note 28 at 36; *B. Krawietz*, Brain Death and Islamic Tradition, in *J.E. Brockopp* (ed.), *Islamic Ethics of Life, Abortion, War, and Euthanasia*, Columbia 2003, 194–213 at 196 et seq.

³⁵ Cf. *Rady, Verheijde & Ali*, supra note 33 at 187; *Sachedina*, supra note 27 at 176; *Atighetchi*, supra note 27 at 161, 297; see also *Albar*, supra note 22 at 818 et seq.

³⁶ *Rispler-Chaim*, supra note 22 at 31.

³⁷ *Marcotte*, supra note 28 at 37.

³⁸ See an overview of the *fatāwā* in *Albar*, supra note 22 at 820; see also *Atighetchi*, supra note 27 at 169 et seq.; *Marcotte*, supra note 28 at 34 et seq.; *Krawietz*, supra note 34 at 195.

³⁹ See, e.g., *Atighetchi*, supra note 27 at 161 et seq.

⁴⁰ *Rispler-Chaim*, supra note 22 at 76 et seq., 81 et seq.; *Atighetchi*, supra note 27 at 298.

⁴¹ Cf. *Albar*, supra note 22 at 819; *Atighetchi*, supra note 27 at 162, 297 et seq. regarding post-mortems; *A.-M. Hassaballah*, Definition of Death, Organ Donation and Interruption of Treatment in Islam, *Nephrology Dialysis Transplantation* 11 (1996), 964–965 at 965.

⁴² *Rispler-Chaim*, supra note 22 at 29; *Albar*, supra note 22 at 819; *Atighetchi*, supra note 27 at 169; *Sachedina*, supra note 27 at 185.

was recognised that there are certain universal values or principles that should be protected and promoted by the law. In addition to the protection of life, which has already been mentioned, these are the protection of the mind, religion, private property and offspring.⁴³ Also, in Islam, the faithful are expected to take good care of and support each other especially in times of illness and suffering.⁴⁴ Illness is considered a natural occurrence, and, according to the Qur'an, illness and suffering exist by the will of God. They not only test the faithful, but also contribute to the expiation of sins.⁴⁵ Religious tenets obligate the healthy to take good care of afflicted persons and to show them compassion. In this sense, care of the sick is a social obligation.⁴⁶ Islam does not demand passivity, for tradition has it that the Prophet Muhammad declared that there exists a cure for every illness even if it is not yet known.⁴⁷ Thus, humans are encouraged to search for a cure through scientific research and apply it to those afflicted by disease.⁴⁸ On the whole, these deliberations take into account what is good for society at large and what serves public interest; through the concept of *maṣlaḥa*, lives can be saved, and efforts to save lives are considered licit.⁴⁹

b) Human Organs

By definition, organ transplantation is concerned with parts of the human body. In recent years, advances in the medical field have rendered a classification of human organs necessary. In particular, it became apparent that the question of which organs can be donated during one's lifetime had to be answered.⁵⁰ In classical legal discourse, parts of the human body were discussed and classified in connection with *diya* (blood money),⁵¹ an amount of money which must be paid in recompense for the accidental or semi-intentional killing or injuring of another person and in cases where someone has killed another intentionally but a sentence for retaliation (*qiṣās*) could not be pronounced due to the absence of certain preconditions.⁵² The value of the compensation paid as *diya* depends on various factors such as the gender of the victim and his or her social/legal status. Regarding the injured body parts, the jurists developed a functional hierarchy, grouping the organs into single organs, pairs, and double-pairs.⁵³

⁴³ Cf. *Hallaq*, supra note 25 at 145.

⁴⁴ See *Atighetchi*, supra note 27 at 269 et seq.; see also the tradition cited in *Hassaballah*, supra note 41 at 964.

⁴⁵ See Qur'an sura 2, verses 155-157; sura 57, verse 22; sura 64, verse 11; see in detail: *Atighetchi*, supra note 27 268 et seq.; *Sachedina*, supra note 27 at 77 et seq., 92 et seq.

⁴⁶ See *Atighetchi*, supra note 27 at 162; see also *Albar*, supra note 22 at 819; see also *Rispler-Chaim*, supra note 22 at 30.

⁴⁷ Bukhari, *Sahih*, Vol. 7, Book 71, *hadīth* 582; *Albar*, supra note 22 at 189.

⁴⁸ See *Sachedina*, supra note 27 at 167; *Albar*, supra note 22 at 818.

⁴⁹ See *Rispler-Chaim*, supra note 22 at 29.

⁵⁰ Cf. *Rispler-Chaim*, supra note 22 at 31; *Sachedina*, supra note 27 at 187.

⁵¹ The law of the *diya* is founded on the Qur'an: See Qur'an sura 4, verse 92; *Rudolph*, supra note at 49; *V. Rispler-Chaim*, *Disability in Islamic Law*, Dordrecht 2007 at 87; *Sachedina*, supra note 27 at 187 et seq.

⁵² E.g., according to most schools of Islamic law, retaliation for bodily harm or homicide is only allowed if the victim's bloodprice is the same or higher than the perpetrator's. See the detailed discussion in *R. Peters*, *Crime and Punishment in Islamic Law*, Cambridge 2005 at 44 et seq., 49.

⁵³ The starting point is that the full amount of *diya* (which amounted to one hundred camels or equivalent in classical times) is due for the loss of life and organs that are single in the body (such as the nose, tongue, penis etc.), the loss of a paired organ (such as the hands, eyes), and a bodily faculty (the loss of one's sense of vision, ability to speak). Half the *diya* is due for the loss of one of a pair (such as one eye or hand). In other cases, the amount of the *diya* is prescribed in percentages of the full or the half *diya*. Where the law does not prescribe the compensation, it is the judge's task to assess the harm caused. See *Rispler-Chaim*, supra note 51 at 87-89; *M. Kahf*, *Economics of Liability: An Islamic View*, *IJUM Journal of Economics and Management* 8 (2000), 85-107, 90-92.

This traditional classification by functionality is not suited to the context of organ transplantation. For one thing, many of the injuries that qualify for diya mutilate and deform the human body and therefore constitute highly questionable if not outright forbidden acts. Secondly, because an individual does not 'own' her or his body according to Islamic teaching, in most cases, that person could not donate an organ that exists only singly in the human body sans committing suicide, which is deemed to be forbidden in Islam.⁵⁴ Such altruism would quite clearly violate the axiom of 'no harm', because greater harm would be inflicted on the donor in order to save the life of the patient.⁵⁵ Based on this ethico-legal framework, the distinction between vital and other organs was introduced to the scholarly debate and contemporary transplantation legislation.⁵⁶ Broadly speaking, body tissues can be classified as renewable (e.g. skin, bone marrow, blood⁵⁷) and non-regenerative (other organs). The former can be donated in order to save the recipient's life as long as the donor's life and health – both physical and psychological – are not jeopardised. The latter can only be donated once and, because many of them are vital, usually only after death.⁵⁸ Also, due to the lack of body-ownership, the sale of and trade in human organs is mostly considered a forbidden act, although in detail, different positions on the subject do exist.⁵⁹

3. Death

a) Classical Definition

Similarly to life, the Qur'an addresses the topic of death frequently but remains vague regarding its definition.⁶⁰ In the Qur'an it is clearly stated that death is inevitable⁶¹ and that the dead will be resurrected in order to account for their earthly deeds.⁶² According to this primary source of faith, it is God alone who knows the exact timing of a person's death,⁶³ which occurs when the spirit, or soul (*rūḥ*), leaves the human body.⁶⁴ However, it is not indicated where in the human body the soul is located nor which signs mark its departure,⁶⁵ despite the fact that the passing away of a human being entails legal consequences. Therefore, historically, there has been much debate about the indicators of death. In Islamic jurisprudence, death was eventually understood as a gradual process, in which there is an intermediate state between the onset of death and the moment when the spirit has been separated completely from the body.⁶⁶ In the classical era, certain (non-binding and varying) criteria that indicate the separation of the spirit from the body at the time of death were identified by Muslim jurists, such as the whitening of the skin, the heaviness of limbs, the parting of the lips, and the

⁵⁴ See above, section 1.a); *Rispler-Chaim*, supra note 22 at 31.

⁵⁵ Cf. *Sachedina*, supra note 27 at 185.

⁵⁶ See below, sections III.1. and 3.a).

⁵⁷ According to *Sachedina*, supra note 27 at 189, the permission to donate blood is mainly based on traditional Arab medicine where cupping (*al-hijjama*) was practiced. See also *Rispler-Chaim*, supra note 22 at 41 et seq.

⁵⁸ Cf. *Rispler-Chaim*, supra note 22 at 31; *Sachedina*, supra note 27 at 187 et seq.

⁵⁹ See, in this regard: *Atighetchi*, supra note 27 at 178 et seq.; *Rispler-Chaim*, supra note 22 at 38 et seq.

⁶⁰ Cf. *Sachedina*, supra note 27 at 146.

⁶¹ See, e.g., Qur'an sura 3, verse 185, sura 4, verse 78, sura 55, verse 26.

⁶² The resurrection is the subject matter of the 75th sura of the Qur'an (*al-Qiyama*) and a theme of many other Qur'anic verses (see, e.g., sura 49, verses 49-50).

⁶³ See *Sachedina*, supra note 27 at 146; see also *Krawietz*, supra note 34 at 198.

⁶⁴ Cf. Qur'an sura 39, verse 42.

⁶⁵ *Atighetchi*, supra note 27 at 297; *Krawietz*, supra note 34 at 198 et seq.

⁶⁶ See *Sachedina*, supra note 27 at 152 et seq., 155 et seq.

weakening of sight.⁶⁷ These criteria coincided with the scientific definition of death, which identified this state with the complete cessation of the cardio-respiratory functions. And from the theological point of view, the completion of the signs of death finally marks the complete departure of the soul from the human body.⁶⁸

b) Brain Death Criteria

Prior to the mid-20th century, the irreversible cessation of spontaneous respiration and heartbeat was the scientifically accepted definition of death.⁶⁹ In the 1950s, this concept was challenged by refined methods of mechanical ventilation, which made it possible to sustain cardio-vascular functions in a patient despite the absence of spontaneous breathing. In addition, intensive care medicine and operative techniques improved. In 1959, in a pivotal study, French physiologists Mollaret and Goulson described 23 patients suffering from 'le coma depasse' (irreversible or irretrievable coma). In this paper, the authors reported the neurological findings that would later become known as 'brain death'.⁷⁰ In the years following the publication of this paper, the growing numbers of patients on life-support machines as well as the growing need for transplantable organs were the major forces driving the effort to define death in terms of neurological criteria.⁷¹ In 1968, the report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death defined brain death as the irreversible loss of all brain functions, both cerebral and brain stem, and presented certain criteria for the diagnosis. These included irreversible coma with absence of movement, breathing, and reflexes, with an iso-electric electroencephalogram (EEG), and no alteration in these findings after at least 24 hours of observation.⁷² A few years later, it emerged that damage to the brainstem was critical for brain death and eventually the concept of 'brain stem death' was developed by physicians from the United Kingdom (UK).⁷³ This formulation, which is the standard used in the UK and some countries that were formerly in its protectorate, does not require that all brain functions have ceased but that none of the potentially persisting functions indicate any form of consciousness.⁷⁴ In the USA, by contrast, the 1981 Uniform Determination of Death Act (UDDA) is based on the whole-brain formulation, which requires that all functions in the entire brain must have ceased.⁷⁵

When the brain death criterion was recognised in the late 1960s, organ transplantation was non-existent on the Arabian Peninsula. After the first transplant programmes developed in the

⁶⁷ See *Krawietz*, supra note 34 at 199; *Atighetchi*, supra note 27 at 174; *Sachedina*, supra note 27 at 152 et seq.

⁶⁸ *Albar*, supra note 22 at 817; *Krawietz*, supra note 34 at 199; *Rispler-Chaim*, supra note 22 at 34.

⁶⁹ See *J.D. Morenski et al.*, Determination of Death by Neurological Criteria, *Journal of Intensive Care Medicine* 18 (2003), 211–221 at 211.

⁷⁰ *Morenski et al.*, supra note 69 at 211.

⁷¹ *Morenski et al.*, supra note 69 at 211; see also *D. Gardiner et al.*, International Perspective on the Diagnosis of Death, *British Journal of Anaesthesia* 108 (2012), i14–i28 at i15.

⁷² *H. Beecher*, A Definition of Irreversible Coma: Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, *The Journal of the American Medical Association* 205 (1968), 337–340; *S. Laureys*, Death, Unconsciousness and the Brain, *Nature Reviews Neuroscience* 6 (2005), 899–909 at 899; *Morenski et al.*, supra note 69 at 211.

⁷³ *Laureys*, supra note 72 at 899.

⁷⁴ *M. Smith*, Brain Death: Time for an International Consensus, *British Journal of Anaesthesia* 108 (2012), i6–i9 at i6 et seq. with further references.

⁷⁵ See Uniform Determination of Death Act, § 1(2), available at <<http://www.uniformlaws.org/shared/docs/determination%20of%20death/udda80.pdf>>, accessed 15 February 2014; *Gardiner et al.*, supra note 71 at 925; *Smith*, supra note 74 at i7; see also *A.I. Padela & T.A. Bassler*, Brain Death: The Challenges of Translating Medical Science into Islamic Bioethical Discourse, *Medicine and Law* 31 (2012), 433–450 at 437.

1980s,⁷⁶ organ shortage became a real problem. At the same time, due to the very high incidence of traffic accidents with resulting serious brain injuries, the issue of brain death became pivotal.⁷⁷

As a matter of fact, in Islam, a number of ethico-legal opinions on the concept of brain death exist.⁷⁸ In particular, there has been much debate about whether it is lawful to explant organs from individuals who seem to be 'alive' even though these signs of life are due to high-tech medicine. On the one hand, it is argued that such an individual is not dead but dying, because the soul had not yet departed from the still warm body.⁷⁹ On the other hand, if brain death is accepted as legal death, should a cessation of brain function indicate the departure of the soul?⁸⁰ Or, in other words, can the failure of a single organ – as opposed to the gradual end of the whole organism – be accepted as death?⁸¹

Uncertainties about establishing the death of an individual had already been discussed extensively by the classical jurists who considered a certain waiting-period recommendable in the case of some causes before a definite declaration of death.⁸² Mainly due to the ambiguity surrounding the nature and timing of death, Islamic jurists have shown a degree of reluctance to accept the brain death formula as a valid definition for 'death'. Consonant with this attitude are various opinions on brain death issued by Muslim juridical councils.⁸³ In 1985, in Kuwait, scholars of the Islamic Organization for Medical Sciences (IOMS) adopted the brain-stem criterion in the context of organ transplantation by equating this state to the condition that is termed in Islam unstable or expiring life,⁸⁴ i.e., a state between life and death. However, although the scholars decided that an individual declared brain stem dead may be disconnected from life-support apparatuses, legal death would not be deemed to have occurred until all cardio-respiratory functions had ceased.⁸⁵ A year later, in Amman, Jordan, at the Third International Conference of Islamic Jurists, a declaration was issued by the Islamic Fiqh Academy Council of the Organization of the Islamic Conference (OIC) that equated brain death to the arrest of cardio-respiratory functions. According to this fatwā, a person can be pronounced dead in two instances: First, if heartbeat and breathing stop and physicians decide that this state is irreversible, and second, if all vital brain functions cease and the consultant

⁷⁶ See below, section III.1.

⁷⁷ See *J. Grundmann*, Shari'ah, Brain Death, and Organ Transplantation: The Context and Effect of Two Islamic Legal Decisions in the Near and Middle East, *The American Journal of Islamic Social Sciences* 22 (2005), 1–25 at 2; *F.A.M. Shaheen & M.Z. Souqiyeh*, How to Improve Organ Donation in the MESOT Countries, *Annals of Transplantation* 9 (2004), 19–21 at 20; on the issue of organ shortage: *A.A. Al Sayyari*, The History of Renal Transplantation in the Arab World: A View from Saudi Arabia, *American Journal of Kidney Diseases*, 6 (2008), 1033–1046 at 1038 and below, section 3. Regarding the incidence of traffic accidents in the Arabian Peninsula, see *Pulitzer Center on Crisis Reporting*, Washington D.C., 'Roads Kill Map', available at <<http://roadskillmap.com/>> accessed 15 February 2014.

⁷⁸ See *A.I. Padela, A. Arozullah & E. Moosa*, Brain Death in Islamic Ethico-Legal Deliberation: Challenges for Applied Islamic Bioethics, *Bioethics* 27 (2013), 132–139 at 133; *Krawietz*, supra note 34 at 200 et seq.

⁷⁹ Cf. *Atighetchi*, supra note 27 at 175, 191; *M. Al-Mousawi, T. Hamed & H. Al-Matouk*, Views of Muslim Scholars on Organ Donation and Brain Death, *Transplantation Proceedings* 29 (1997), 3217 at 3217.

⁸⁰ Cf. *Padela, Arozullah & Moosa*, supra note 78 at 6.

⁸¹ Cf. *Grundmann*, supra note 77 at 6.

⁸² See *Rispler-Chaim*, supra note 22 at 79; *Atighetchi*, supra note 27 at 298; see also *Krawietz*, supra note 34 at 199 with further references: If there was doubt regarding an individual's death, her or his body was to be left alone until it started to smell.

⁸³ See, e.g., *Padela, Arozullah & Moosa*, supra note 78 at 133 et seq.

⁸⁴ This is a state between life and death and is characterised by certain conditions that indicate lingering life without consistent cardiac and respiratory functions: *Sachedina*, supra note 27 at 155; *Krawietz*, supra note 34 at 206.

⁸⁵ See *Padela, Arozullah & Moosa*, supra note 78 at 6; *Padela & Basser*, supra note 75 at 439; *Grundmann*, supra note 77 at 8.

doctors rule that this state is irreversible and the brain has begun to degenerate. Under these circumstances it is permissible to disconnect life support machines.⁸⁶ Yet in contrast to the 1985 decision of the IOMS, the 1986 ruling of the Islamic Fiqh Academy of the OIC did not explicitly endorse the whole brain or brain stem criteria but rather had resort to the caveat of the irreversible cessation of all vital brain functions.⁸⁷ In Saudi Arabia, the Council of Senior Ulama has declared that it is permissible to cease treatment including mechanical ventilation in hopeless cases.⁸⁸

Today, while a plurality of opinions among Muslim legal scholars persists, the identification of brain death with death has been largely accepted in medical circles.⁸⁹ Also, the concept of brain death has been accepted in the Arabian Peninsula.⁹⁰

4. Socio-Cultural Factors Influencing Donation Practice

It is a well-known fact that the significance of tribal culture and extended familial bonds, as well as respect for parents and senior family members is still very high in the modern Muslim societies on the Arabian Peninsula.⁹¹ The importance of family and procreation is underscored in the Qur'an, which mandates marriage for everyone who is physically and financially fit to pursue conjugal life. This primary source of religion also considers the birth of offspring conceived within matrimony a blessing.⁹² In this spirit, the constitution of the UAE states that the family is the basis of society and that the law shall safeguard its existence.⁹³ In fact, marriage and procreation are actively encouraged by financial incentives and support.⁹⁴ It should also be stressed that the UAE is a close-knit community where families know each other and family members usually share a hierarchical male lineage that can be traced back for many generations. Family members are usually very close – both emotionally and geographically – and the opinions of senior adult family members in particular carry great weight. In addition to the general views such family members may have regarding the issue of organ transplantation, the importance of the extended family is mirrored in the transplantation legislation, where it is often provided that consent must be obtained from the next of kin, sometimes up to the second degree, in the absence of consent from the deceased potential

⁸⁶ Kingdom of Saudi Arabia, Saudi Health Council, Saudi Center for Organ Transplantation, *Diagnosis of Death by Brain Function Criteria*, Riyadh 2007, Appendix VII (SCOT Regulations re Brain Death); *Albar*, supra note at 820; *Al Sayyari*, supra note 77 at 1037; *Hassaballah*, supra note 41 at 964.

⁸⁷ See the discussion in *Padela, Arozullah & Moosa*, supra note 78 at 4 et seq.

⁸⁸ See the Fatwas of the Permanent Committee for Scholarly Research and Ifta', Group 1, Vol. 25, Miscellaneous Fatwas 2, Page Nos. 79–83, Fatwas No. 12086 and 12762; Decree of the Council of Senior Ulama No. 190 of 1419 H. (Fatwas on Medical Issues and the Sick, Rules related to terminal illness, heart-lung resuscitation in certain hopeless cases); see also *Al Sayyari*, supra note 77 at 1037.

⁸⁹ See *Al-Mousawi, Hamed & Al-Matouk*, supra note 79 at 3217; *Padela, Arozullah & Moosa*, supra note 78 at 133; see also *Atighetchi*, supra note 27 at 175; see also the critical remarks in *Krawietz*, supra note 34 at 207.

⁹⁰ See below, sections III.3.b) and IV.

⁹¹ Regarding the concept of the Muslim family, see *F. Moazam*, *Bioethics & Organ Transplantation in a Muslim Society*, Bloomington 2006 at 77 et seq.

⁹² See, e.g. Qur'an sura 17, verses 23, 24, sura 24, verses 32, 33, sura 16, verse 72, sura 18, verse 46 exemplify the importance of marriage, procreation and the way children should honour their parents. On marriage, see *J.L. Esposito*, *Women in Muslim Family Law*, 2nd ed., Syracuse 2001 at 14 et seq.; regarding the role of parents in inner-familial organ donation see *F.A.M. Shaheen et al.*, *Social and Cultural Issues in Organ Transplantation in Islamic Countries*, *Annals of Transplantation* 9 (2004), 11–13 at 13.

⁹³ See Art. 15 UAE Constitution. – Similar provisions can be found in other constitutions in the Arabian Peninsula.

⁹⁴ – Through instruments like the 'Marriage Fund' (*sandūq al-zawāj*), which sponsors group-weddings and provides grants and housing supports for male citizens marrying female citizens.

donor during her or his lifetime.⁹⁵ In practice, on the one hand, the consultation process between family members can mean a long decision-making process, which is quite obviously at odds with the need to remove organs from a deceased person as soon as possible since in transplantation medicine, time is of the essence.⁹⁶ On the other hand, close family ties often mean that the readiness to donate is usually high between living relations,⁹⁷ whereas the readiness to donate an organ after death or to receive an organ from a deceased person is significantly lower.⁹⁸ In Oman, for example, family refusal is one of the main reasons for the kidney transplantation program being based solely on living related kidney donors.⁹⁹ In consonance with these findings, the majority of organs used in Middle Eastern transplantation medicine really do come from living, related donors, i.e., donors are related to the patient genetically or by marriage.¹⁰⁰ By contrast, non-living donation is a rare occurrence in this region.¹⁰¹ In order to encourage donation after death, various campaigns, which include the publication of select religious rulings, have been launched in the Gulf region.¹⁰²

III. The UAE Transplantation Legislation

1. Development of Transplantation Regulations in the Arabian Peninsula

Over the past few decades, transplantation medicine has progressively found approval in the countries of the Arabian Peninsula. At the same time, academic debate and public dialogue regarding a variety of issues, such as transplants from deceased donors,¹⁰³ the permissibility of

⁹⁵ See *Shaheen et al.*, supra note 92 at 12 et seq.

⁹⁶ See *E.O. Kehinde*, Attitude to Cadaveric Organ Donation in Oman, Preliminary Report, Transplantation Proceedings 30 (1998), 3624–3625 at 3625 on the situation in the Sultanate of Oman. According to the Ministerial Decision No. 8/1994, the closest relative may give the consent to donate in the absence of a consent given by the potential donor while alive (Art. 2); yet in practice, it is the extended family that decides. Furthermore, see *Shaheen et al.*, supra note 92 at 13; *Atighetchi*, supra note 27 at 174.

⁹⁷ See *Shaheen et al.*, supra note 92 at 13. – In Qatar, for example, most kidney donors are living related: *A. Rasheed & O. Aboud*, Renal Transplantation: Seventeen Years of Follow-Up in Qatar, Transplantation Proceedings 36 (2004), 1835–1838 at 1837.

⁹⁸ See, e.g., *M. Mohsin et al.*, Attitude of the Omani Population Toward Organ Transplantation, Transplantation Proceedings 42 (2010), 4305–4308 at 4306; *Rasheed & Aboud*, supra note 97 at 1837.

⁹⁹ Similar findings have been reported from other Gulf States. See *M. Al-Mousawi et al.*, Cadaver Organ Procurement in Kuwait, Transplantation Proceedings 32 (1999), 33375–3376 at 3375. – For a study from Saudi Arabia, see *A.A. Alam*, Public Opinion on Organ Donation in Saudi Arabia, Saudi Journal of Kidney Diseases and Transplantation 18 (2007), 54–59 and *B. Al-Attar et al.*, Brain Death and Organ Donation in Saudi Arabia, Transplantation Proceedings 33 (2001), 2629–2631, 2629 et seq.

¹⁰⁰ See *Atighetchi*, supra note 27 at 168; *Shaheen & Souqiyyeh*, supra note 77 at 20.

¹⁰¹ See *D. Budiani & O. Shibly*, Islam, Organ Transplants, and Organ Trafficking in the Muslim World: Paving a Path for Solutions, in *J.E. Brockopp & Th. Eich*, Muslim Medical Ethics: From Theory to Practice, Columbia 2008, 138–150 at 139; see, for Qatar: Gulf Times, 15 July 2013: 4'000 on Organ Donor Register, available at <<http://www.gulf-times.com/qatar/178/details/359521/4,000-on-organ-donor-register>> accessed 15 February 2014.

¹⁰² See, e.g., The Peninsula (Qatar), 9 October 2012: “16,606 people vow to donate organs”, available at <<http://thepeninsulaqatar.com/news/qatar/256360/16606-people-vow-to-donate-organs>> accessed 15 February 2014; ‘Shariah Fatwa on the Organ Donation’ by Dr. Sheikh Yusuf Al-Qaradawi (Qatar), available at <http://organdonation.hamad.qa/en/what_is_organ_donation/religious_perspectives/religious_perspectives.aspx> accessed 15 February 2014.

¹⁰³ For example, while the influential Saudi cleric ‘*Abd al-‘Aziz bin ‘Abd Allāh bin Bāz (Ibn Baz*, d. 1999), the former Grand Mufti of Saudi Arabia, acknowledged the ambiguity of the issue, he did not support post-mortem organ donation. Citing hadith evidence, this individual underscored the impermissibility of mutilating a dead body in favour of living persons as a basic principle. In addition, *Ibn Baz* pointed to the danger of commercialization of body parts by the heirs of the deceased: *Fatwas of Ibn Baz*, Vol. 13, Books on Funerals, Page No. 364, Organ transplant after brain death.

inter-religious organ donation and transplantation,¹⁰⁴ as well as the order of priority of beneficiaries and the criteria of death¹⁰⁵ are still on-going.

In the light of these concerns, it is somewhat surprising perhaps that the first successful kidney transplant in the Arab world involved a kidney from a deceased donor (Jordan 1972).¹⁰⁶ In the Arabian Peninsula, at the end of the 1970s, visiting doctors from the UK came to Saudi Arabia in order to perform a few transplants. From the early 1980s onwards, Saudi physicians started to transplant organs procured locally as well as kidneys obtained from Eurotransplant.¹⁰⁷ However, from the start, there has been a marked shortage of donor organs. In addition, since most other countries in the Peninsula did not have (functioning) organ transplant programmes, it was common for patients from the states bordering the Persian Gulf to travel abroad in order to undergo transplantation procedures. As an unfortunate side-effect of this ‘transplantation tourism’, the international trade in human organs and the exploitation of donors, who typically come from lower socio-economic background, has been intensified.¹⁰⁸

Saudi Arabia and Kuwait were the first countries in the Arabian Peninsula to legislate¹⁰⁹ in the realm of organ transplantation. In 1978, the Saudi Council of Senior Ulama issued an official fatwā which approved corneal transplantation.¹¹⁰ Four years later, in 1982, this body issued a fatwā permitting autotransplantation for a *ḍimmī*¹¹¹ and a Muslim, as well as tissue and organ transplantation from both living and deceased donors for the benefit of a Muslim.¹¹² In line with these precedent-setting legal opinions, in 1984, the first two kidney transplantations from a deceased local donor who was declared brain dead by using the brain-stem criterion¹¹³ were performed in Saudi Arabia.¹¹⁴ In 1985, the National Kidney Foundation was established and in 1993, renamed the Saudi Center for Organ Transplantation (SCOT). Today, the SCOT is the central coordinating body for all types of organ transplants in the kingdom.¹¹⁵ Eventually, several scientific committees were established to deal with various aspects of organ transplantation and tasked with the preparation of regulations which allow for organ donation both from related living donors as well as brain dead donors and corpses and to outline the diagnosis, confirmation and management of brain death.¹¹⁶ Organ donation from living

¹⁰⁴ In this regard, see *Atighetchi*, supra note 27 at 164 et seq.; *Rispler-Chaim*, supra note 22 at 35, 36 et seq.

¹⁰⁵ See, e.g., *Atighetchi*, supra note 27 at 161 et seq.; *Marcotte*, supra note at 33 et seq., 37 et seq.

¹⁰⁶ *Al Sayyari*, supra note 77 at 1033.

¹⁰⁷ See *Al Sayyari*, supra note 77 at 1037 et seq.; see also, regarding the UAE transplantation tourism: *Grundmann*, supra note 77 at 16.

¹⁰⁸ See *Budiani & Shibly*, supra note 101 at 140; see also *Al Sayyari*, supra note 77 at 1037 et seq.

¹⁰⁹ This term is used in a wider sense here because in Saudi Arabia, where divine law is superior to any man-made law, the legal rulings from select clerics usually have quasi-legislative effect.

¹¹⁰ Resolution No. 66 of 1398 H. (1978); *Albar*, supra note 22 at 820.

¹¹¹ Non-Muslim individual residing in Muslim territory.

¹¹² Resolution No. 99 of 1042 H. (1982 AD); *Alam*, supra note 99 at 55.

¹¹³ See *Al Sayyari*, supra note 77 at 1040; *Atighetchi*, supra note 27 at 176. – In later years, Saudi Arabia and other countries in the region opted for the whole brain formula; however, in the Sultanate of Oman, brain death is still equated with the brainstem formula: Medical Procedures accompanying Ministerial Decision No. 8/1994, ‘Diagnosis of Death’.

¹¹⁴ *Al Sayyari*, supra note 77 at 1040; W.K. *Al-Khudair & S.O. Huraib*, *Kidney Transplantation in Saudi Arabia: a Unique Experience*, *World Journal of Urology* 14 (1996), 268–271 at 268.

¹¹⁵ See *Shaheen & Souqiyeh*, supra note 77 at 20; *Al-Attar et al.*, supra note 99 at 2629.

¹¹⁶ F.A.M. *Shaheen*, *Organ Transplant in the Kingdom of Saudi Arabia: New Strategies*, *Saudi Journal of Kidney Diseases and Organ Transplantation* 5 (1994), 3–5 at 4; *United Nations Educational, Scientific and Cultural Organization (Cairo Office)*, *Ethics and Law in Biomedicine and Genetics: An Overview of National Regulations in the Arab States*, Cairo 2011 (cited as UNESCO Cairo Office) at 49; *Kingdom of Saudi Arabia/Saudi Health Council/Saudi Center for Organ Transplantation*, *Diagnosis of Death by Brain Function Criteria* at 7 et seq. (SCOT Regulations re Brain Death).

unrelated donors was recognised in 2007 when the Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors were developed and released.¹¹⁷ According to these regulations, the SCOT supervises organ donation from living unrelated donors. Donors must be adult nationals or legal residents¹¹⁸ of at least one year and undergo a thorough medical and psychological evaluation, which has to be assessed by the SCOT. If the outcome of this assessment is positive, the SCOT will issue its written consent to the donation.¹¹⁹ In order to prevent organ trade, the SCOT coordinates financial compensation for the donor, which includes the re-imburement of wage loss and the issuance of a King Abdul Aziz Medal of third degree for the donor.¹²⁰ Donation from any living individual requires free and informed consent.¹²¹ According to the Saudi regulative framework, diseased or brain dead donors¹²² must also have expressed their consent in their lifetime. Alternatively, consent from the next of kin must be obtained. The relatives have to sign a written consent in the presence of two witnesses. In the case of prospective donors with unknown identity, permission may be obtained from the competent authority.¹²³ In all cases, donation from deceased donors requires the diagnosis of death by two specialist physicians who may not be part of the organ transplant team.¹²⁴ Today, many types of transplants are carried out in Saudi Arabia, which remains the regional leader in organ transplantation.¹²⁵

In 1987, the Kuwaiti government issued Decree-Law No. 55 on Organ Transplantation.¹²⁶ According to this law, organ donors must be fully competent and have signed a written consent in the presence of two witnesses, which they may withdraw at any time.¹²⁷ After a medical examination, the donor must be informed of the consequences of donation in writing.¹²⁸ In consonance with Islamic juridical-ethical rules, the donation of vital organs or organs that are necessary to carry out one's activities, is prohibited.¹²⁹ Deceased individuals¹³⁰ must also have given their written consent to donation in the presence of two witnesses.¹³¹ Regarding organ removal from a deceased person who has not personally expressed permission, this operation is only lawful if at least the majority of the potential donor's relatives of the same degree consent in writing to the donation and the deceased has not objected to donation in writing and in the presence of two witnesses during her or his lifetime.

¹¹⁷ Prince Fahad Bin Salman Charity Association for Renal Failure Patients Care/Kingdom of Saudi Arabia, *Saudi Center for Organ Transplantation, Regulations and Procedures for Organ Donation from the Living Genetically Unrelated Donors*, Riyadh 2007 (SCOT Regulations for Organ Donation from LURD).

¹¹⁸ According to the SCOT Regulations for Organ Donation from LURD, „Aim“, No. 4, minors are not accepted as donors.

¹¹⁹ SCOT Regulations for Organ Donation from LURD, „Procedure“, Nos. 2–6, 8–9.

¹²⁰ SCOT Regulations for Organ Donation from LURD, „Procedure“, No. 12; *UNESCO Cairo Office*, supra note 116 at 47.

¹²¹ SCOT Regulations for Organ Donation from LURD, „Procedure“, No. 3; *UNESCO Cairo Office*, supra note 116 at 47.

¹²² In this regard, see *Saudi Center for Organ Transplantation, Regulations, Criteria for Fitness of Cadaveric Donor*, available at <www.scot.org.sa>.

¹²³ *Saudi Center for Organ Transplantation, Regulations, Procedure of Deceased Organ Donation, Step VI.*

¹²⁴ *Saudi Center for Organ Transplantation, Regulations, Procedure of Deceased Organ Donation, Step III.* – For the prerequisites, see also GCC Unified Manual for Organ Transfer and Transplant, below, section IV.

¹²⁵ See *Al Sayyari*, supra note 77 at 1041; C.C. *Canver et al.*, A High-Volume Heart Transplantation Center in an Islamic Country, *Asian Cardiovascular and Thoracic Annals* 19 (2011), 244–248 at 233.

¹²⁶ See the English text of the law in: *World Health Organization, Legislative Responses to Organ Transplantation*, Dordrecht 1994 at 250 et seq. See also Ministerial Orders Nos. 44–46 of 1989 and No. 253 of 1989, the implementing regulations.

¹²⁷ Art. 2, 4 Kuwait Organ Transplant Law.

¹²⁸ Art. 4 Kuwait Organ Transplant Law.

¹²⁹ Art. 3 Kuwait Organ Transplant Law.

¹³⁰ Including brain dead individuals. In this regard see Ministerial Order No. 253 of 1989.

¹³¹ Art. 2 Kuwait Organ Transplant Law.

In addition, three medical specialists have to have confirmed death.¹³² Organ trade is prohibited.¹³³ The consequences of violations of the law include imprisonment and fines.¹³⁴

In the 1990s and early 2000s, the other countries in the Arabian Peninsula followed suit and enacted national transplantation legislation: The UAE (1993),¹³⁵ Oman (1994),¹³⁶ Qatar (1997),¹³⁷ Bahrain (1998),¹³⁸ and Yemen (2002).¹³⁹ While differing on some points, these laws enshrine the same fundamental principles such as the necessity of written consent from donors, who have to be fully informed of the potential risks and consequences of organ removal, the right to withdraw this consent at any time, and the prohibition of organ trafficking.¹⁴⁰ Furthermore, in all countries except Oman and Yemen,¹⁴¹ donors and recipients may be living related donors or living non-related donors. The laws also permit the procurement of organs from dead persons; but due to the reluctance concerning post-mortem donation, as well as unresolved legal and practical issues, transplantation of vital organs such as hearts only occurs sporadically or not at all.¹⁴²

2. Legal Framework of the UAE Health Legislation

In recent years, significant process has been made in modernising the UAE healthcare system by creating new authorities and enhancing the legal framework. Various regulatory bodies, such as the Ministry of Health, Health Authority Abu Dhabi (HAAD), the Dubai Health Authority (DHA), and the Emirates Health Authority (EHA) currently manage public healthcare services, which are free for UAE nationals. The Sharjah Health Authority (SHA), established in 2010, is a recent addition to these entities. The UAE constitution, which provides the legal framework for the federation, grants the federal government exclusive legislative (and, in some instances, also executive) powers over a catalogue of issues that concern principal areas of law and central aspects of the federation. The local governments have the jurisdiction over matters which are not assigned by the constitution to the exclusive jurisdiction of the federal government and which have not yet been regulated by the federation.¹⁴³ While the federal government has the exclusive authority to enact laws in the realm of public health, medical services, as well as insurances of all kinds,¹⁴⁴ the emirates have the duty to implement such federal laws, including the power to issue local laws and regulations necessary to implement federal legislation.¹⁴⁵ In the past few decades since its

¹³² Art. 5 Kuwait Organ Transplant Law.

¹³³ Art. 7 Kuwait Organ Transplant Law.

¹³⁴ See Art. 10 Kuwait Organ Transplant Law.

¹³⁵ UAE Federal Law No. 15/1993 concerning the Transfer and Transplant of Human Organs.

¹³⁶ Omani Ministerial Decision No. 8/1994 concerning the Rules Governing the Transplantation of Human Organs.

¹³⁷ Qatar Law No. 21/1997 on the Organization of the Transfer of Human Organs.

¹³⁸ Bahrain Decree Law No. 16/1998 on Transplants of Human Organs.

¹³⁹ Yemeni Law No. 26/2002 regarding the Practice of the Medical and Pharmaceutical Professions.

¹⁴⁰ See *UNESCO Cairo Office*, supra note 116 at 41 et seq.

¹⁴¹ According to Art. 1(d) of the Omani Ministerial Decision No. 8/1994 concerning the Rules Governing the Transplantation of Human Organs, the recipient must be related to the donor either by blood or through marriage. Regarding Yemen, see *UNESCO Cairo Office*, supra note 116 at 47.

¹⁴² For the exception of Saudi Arabia, see above, footnote 125.

¹⁴³ See Art 116 et seq., 120, 121, 122 and 125 UAE Constitution. – It is noteworthy that the federal Constitution only foresees local laws and regulations within the frame of the implementation of federal laws through the governments of the individual Emirates. See also *Heard-Bey*, supra note 6 at 373 et seq.

¹⁴⁴ See Art. 120 No. 12 and 121(2) UAE Constitution, respectively.

¹⁴⁵ Art. 122, 125(1) UAE Constitution.

foundation (1971), the federal government has enacted general laws pertaining to medical practice as well as many specialised laws.¹⁴⁶ One of the most important as well as earliest laws dates back to the 1970s and regulates the practice of human medicine: Federal Law No. 7/1975 concerning the Practice of Human Medicine (as amended) stipulates the prerequisites for the licensing and registration of physicians, as well as defining the specific requirements for the establishment of medical laboratories, clinics and private hospitals. So far, there is no federal law regulating the issue of health insurance in the UAE.¹⁴⁷

Existing healthcare laws include:

- Federal Law No. 4/1983 concerning Pharmaceutical Professions and Establishments and the Import, Manufacture and Distribution of Pharmaceutical Products
- Federal Law No. 5/1984 concerning the Licensing and Registration of Physicians, Pharmacists and other Healthcare Specialists within both Public and Private Healthcare Establishments
- Federal Law No. 2/1996 concerning Private Health Facilities
- Federal Law No. 10/2008 concerning Medical Liability
- Federal Law No. 11/2008 concerning Licensing Fertility Centers
- Cabinet Decision No. 28/2008 concerning Blood Transfusion Regulation
- Cabinet Decision No. 33/2009 promulgating the bylaw of the Medical Liability Law
- Cabinet Decision No. 36/2009 promulgating the bylaw of the Fertility Centres Law

The UAE federal Constitution, the federal laws relating to free zones and the legislative powers of the individual emirates emanating from the federal Constitution permit each Emirate to set up so-called 'free zones' for various economic activities.¹⁴⁸ In conformity to this legal framework, besides the public hospitals and private clinics, a number of so-called healthcare free zones, which offer private health care of a high international standard to patients, have been set up. Examples are the Dubai Healthcare City and Dubai Biotechnology and Research Park. Within these free zone health establishments, federal and local laws apply but are typically supplemented by the free zone's own regulatory framework, which may also override federal and Emirate-level law in some instances.¹⁴⁹

¹⁴⁶ Federal Law No. 7/1975 concerning the Practice of Human Medicine, as amended; Federal Law No. 5/1984, concerning the Practice of some Medical Professions by Persons other than Physicians and Pharmacists; Federal Law No. 2/1996 concerning Private Medical Facilities, as amended

¹⁴⁷ See, e.g., *E. Schildgen & Z. Tahsili*, Healthcare in the UAE, *Lex Arabiae*, January 2010, available at <<http://lexarabiae.meyer-reumann.com/blog/2010-2/healthcare-in-the-united-arab-emirates/>> accessed 15 February 2014. But see *The National (UAE)*, 8 May 2013: „UAE companies to provide mandatory health insurance for all under draft law“, available at <<http://www.thenational.ae/news/uae-news/health/uae-companies-to-provide-mandatory-health-insurance-for-all-under-draft-law>> accessed 15 February 2014.

¹⁴⁸ While companies established in the UAE are required to have one or more national partners whose share in the company capital must be 51% or more, free zones typically offer 100% foreign ownership of companies within their territory and offer exemptions from taxes and customs duties, as well as other benefits.

¹⁴⁹ See *E. Schneider Kayasseh*, *Das Recht Saudi-Arabiens und der Vereinigten Arabischen Emirate*, *Schweizerische Zeitschrift für internationales und europäisches Recht* 22 (2012), 243–287 at 278. – See, e.g., the clinical Regulations and Rules governing Healthcare Professionals and Healthcare Operators working in Dubai Healthcare City, available at <www.dhcc.ae/http://www.cpq.dhcc.ae/cpq/regulations/> accessed 15 February 2014.

3. The UAE Transplantation Law and Regulation

In 1993, in the wake of earlier Saudi and Kuwaiti transplantation regulations, UAE Federal Law No. 15 on the Transfer and Transplant of Human Organs (Transplant Law) was enacted. Although the law permits both living and deceased donation, it does neither define death nor establish the criteria for diagnosing human death. Namely, due to the absence of a definition of death, it was unclear whether brain death could be defined as human death. In 1998, on the occasion of the first Gulf Cooperation Council Organ Transplantation Congress, prominent (albeit controversial) Muslim scholar Yusuf Al-Qaradawi not only sanctioned live and dead donation and the donation from Muslim to non-Muslim (and vice versa), but also accepted the concept of brain death and subsequent organ removal from such a patient.¹⁵⁰ In May 2010, UAE Ministerial Decision No. 566 on the Implementing Regulation of the Organ Transplantation Law (Transplant bylaw) was issued. This regulation provides the definition that has made it legal for surgeons to explant organs from brain dead patients, as well as establishing the guidelines for multi-organ donation including kidney, liver, lung, pancreas and heart.

a) Donations from Living Individuals

Any adult person with full legal capacity, i.e. an individual who is mentally and physically fully capable and over the age of 21,¹⁵¹ may express the will to donate organs.¹⁵² Conversely, the removal of organs from minors or from living adults who are fully or partially incapacitated is illegal and any consent given by such person or her or his legal representative shall be deemed null and void.¹⁵³ Obviously, this rule is aimed at protecting the bodies and minds of those who are especially vulnerable, namely children and the mentally handicapped. On the other hand, the right of self-determination of the adult donor is protected by the stipulation that the adult donor has to give written approval willed in the presence of two witnesses with full legal capacity and that he or she remains free to withdraw her or his consent at any time prior to the removal of the organ.¹⁵⁴ There are to be no reasons present that invalidate consent.¹⁵⁵

Organs may furthermore only be removed on condition that:

- A thorough physical examination has been performed in order to ensure that the donor is physically fit and that the donation will neither jeopardise her or his health or threaten this individual's life;¹⁵⁶
- A psychological examination by specialist physicians has taken place in order to determine that the donor is acting out of free will and is in a healthy mental condition to undergo the operation;¹⁵⁷

¹⁵⁰ See *El-Shahat*, supra note 25 at 3272; see also *A. Naher, J. M. Low & Y. L. Sim*, Ethical, Religious, Legal and Cultural Issues for Organ Banking, in *A. Naher, N. Yusof & N. Hilmy* (ed.), *Allograft Procurement, Processing and Transplantation: A Comprehensive Guide*, Singapore 2010, 107–120 at 110.

¹⁵¹ Art. 2 Transplant Law, Art. 1, 3(3), 7(1) Transplant bylaw.

¹⁵² Art. 2 Transplant Law, Art. 1, 7(1) Transplant bylaw.

¹⁵³ Art. 2 Transplant Law, Art. 3(3) Transplant bylaw.

¹⁵⁴ Art. 1, 5 Transplant Law, Art. 5(1), 7(2) and 8(1) Transplant bylaw. – After the organ has been removed, consent to donation may no longer be retracted: Art. 5 Transplant Law, Art. 8(1) Transplant bylaw

¹⁵⁵ Art. 7(1) Transplant bylaw.

¹⁵⁶ Art. 3, 4 Transplant Law, Art. 4(a) Transplant bylaw.

¹⁵⁷ Art. 4 Transplant Law, Art. 4(b) Transplant bylaw.

- The donor has been notified in writing and in her or his own language of the results of the necessary tests and examinations and all confirmed and potential side-effects of the organ donation, as well as potential effects on her or his personal and professional life.¹⁵⁸

The removal of a vital organ or an organ that will lead to the death of the donor or will render her or him incapable of performing her or his duty is forbidden even with the donor's consent.¹⁵⁹ As has been previously mentioned, in Islamic teaching, such an act would amount to the crime of homicide or suicide, which is widely considered forbidden.¹⁶⁰ A transplantation procedure may furthermore not take place if the specialist physicians deem it likely that the outcome of the transplantation will not be a success.¹⁶¹ In other words, there must be a fairly good chance that the patient will recover from her or his condition, because otherwise, the interference with the donor's physical integrity would not be justified, since it is not legitimate to injure someone in order to prevent an equal injury. At the same time, this rule reflects the axiom that the benefit to the recipient should be greater than the harm to the donor.

b) Deceased Donors

Any living person may express her or his will to donate organs after death in writing in the presence of two witnesses who are legally fully competent.¹⁶² This declaration of consent must be free of defects,¹⁶³ and may be withdrawn at any time prior to death.¹⁶⁴ In the absence of such an explicit consent, the written consent of the next of kin up to the second degree must be obtained. In the case of multiple relatives of the same degree, majority consent is a prerequisite for the organ removal.¹⁶⁵ This consent is further contingent upon the absence of any written opposition of the decedent to the organ removal, witnessed by two people with full legal capacity, or her or his withdrawal of the consent to donate organs post-mortem before death.¹⁶⁶ At any time prior to organ removal, a positive decision by the majority of the relatives of the first and second degree may be reversed if one or more persons change their minds about the decision to allow donation.¹⁶⁷ In any case, the recovery of organs from a deceased individual depends on the attestation of death by a committee of three specialised, trustworthy physicians one of whom must be a neurologist. Any doctor involved in the transplantation is barred from being party to this committee. These specialists must render a written account of their findings endorsed with their signature.¹⁶⁸ Under the law, death is defined either as the complete and irreversible cessation of heart and lung functions or the complete and irreversible absence of all brain functions, and that the brain has begun to disintegrate.¹⁶⁹ In other words, in the UAE,

¹⁵⁸ Art. 4 Transplant Law, Art. 4(c) Transplant bylaw.

¹⁵⁹ Art. 3 Transplant Law, Art. 3(1) Transplant bylaw.

¹⁶⁰ See *Albar*, supra note 22 at 819.

¹⁶¹ Art. 3(1) Transplant bylaw.

¹⁶² Art. 2 Transplant Law, Art. 5(1) and Art. 7 Transplant bylaw.

¹⁶³ Art. 7(1) Transplant bylaw.

¹⁶⁴ Art. 5 Transplant Law, Art. 8(3) Transplant bylaw.

¹⁶⁵ Art. 6 Transplant Law, Art. 5(2) Transplant bylaw.

¹⁶⁶ Art. 6(2) Transplant Law, Art. 5(2)(b) Transplant bylaw.

¹⁶⁷ Art. 8(2) Transplant bylaw.

¹⁶⁸ Art. 6(1) Transplant Law, Art. 5(2)(a), 6 Transplant bylaw. Arguably, the committee of three doctors was first mentioned of the decision by the Fiqh Academy of the Muslim World League in 1987: *Grundmann*, supra note 77 at 10; see also *Rispler-Chaim*, supra note 22 at 34.

¹⁶⁹ Art. 1 Transplant bylaw.

cardiac death and brain death are explicitly equated. Regarding brain death, the UAE has adopted the whole brain formulation.

c) Joint Provisions

Under the Transplant Law, the term 'organ' is defined as "a group of connected tissues and cells that participate in specific vital functions inside a human body".¹⁷⁰ The law states that organs may be explanted from a donor for the therapeutic purposes of the recipient only.¹⁷¹ In the light of the Islamic teaching outlined above, any other motive for the operation is likely to be considered amounting to an unnecessary – or even forbidden – mutilation, and in case of the dead donor, desecration of the body. Also, it is forbidden to retrieve organs or parts thereof that are associated with reproduction, as well as organs that are carriers of genetic traits, and to transplant them into another individual.¹⁷² This rule reflects a certain worry that genetic materials could be mixed and that the purity of the lineage of a person (*nasab*), and especially of a later-born child, could be compromised.¹⁷³

Further ethico-religious issues, such as the respect for the human body, of which an individual is a mere trustee, and which after death will be resurrected on the Day of Judgment, are reflected in the law. Namely it is stated that human dignity must be respected during the removal of organs and that the body must be protected from humiliation or deformation.¹⁷⁴ In this regard, then, it can be assumed that any operation that would inflict physical deformation or affect the personal appearance of an individual, such as the removal of an eye or face tissue in order to treat people with facial disfigurement, or the donation of a hand or foot, are unlikely to be permitted.¹⁷⁵

Donor identity may not be disclosed to the recipient unless necessary.¹⁷⁶ However, the law does not address recipient anonymity nor specify the selection criteria for recipients. Any form of organ trafficking is illegal under the law and physicians are barred from performing an organ transfer operation as soon as they become aware of a commercial exchange.¹⁷⁷ In spring 2008, representatives from medical bodies from the UAE participated in the International Summit on Transplant Tourism and Organ Trafficking convened by the Transplantation Society and International Society of Nephrology in Istanbul, Turkey, where the Declaration of Istanbul on Organ Trafficking and Transplant Tourism that is based on the Universal Declaration of Human Rights, was issued. Although this declaration represents the consensus of the summit participants rather than being a legal document, it contains important principles, which were eventually presented to country-specific health authorities as well as professional organisations. The document condemns any form of organ trafficking and transplant tourism and calls for eventual national self-sufficiency in organ donation and/or regional collaboration

¹⁷⁰ Art. 1 Transplant bylaw. – Italics added by the author.

¹⁷¹ See Art. 1 Transplant Law, Art. 2(1) Transplant bylaw.

¹⁷² Art. 3(2) Transplant bylaw.

¹⁷³ Similarly, in the realm of reproductive medicine, third-party donation involving the gametes of a person other than the biological parents of the child-to-be is forbidden. In addition, medical personnel must take precautionary measures to ensure that the sperm or eggs of different patients are not mixed up. In this regard, see Art. 10, 19 UAE Federal Law No. 11/2008 concerning Licensing of Fertility Centres in the State.

¹⁷⁴ Art. 2(2) Transplant bylaw.

¹⁷⁵ Art. 2(2) Transplant bylaw; cf. *Sachedina*, supra note 27 at 187 et seq.

¹⁷⁶ Art. 2(2) Transplant bylaw.

¹⁷⁷ Art. 7 Transplant Law, Art. 9 Transplant bylaw.

with appropriate actions to increase deceased organ donation in order to render travel for transplantation obsolete. Another important axiom that is restated is the principle of non-discrimination, i.e. that organs should be allocated to patients without regard to gender, ethnicity, religion, or social or financial status.¹⁷⁸ In this regard, the UAE Constitution stipulates that all citizens are equal and that cooperation and mutual mercy shall be a firm bond between them.¹⁷⁹ Consequently, the UAE transplantation legislation refers neither to the religious affiliation nor the gender of donor and recipient.

In closing, it is stated that operations in connection with the removal and implantation of human organs may only be performed in the medical centres designated by the UAE Ministry of Health for that purpose.¹⁸⁰ At present, the Abu Dhabi National Transplant Center (the Division of Transplantation and Hepatobiliary Surgery at Sheikh Khalifa Medical City) is the only institution where transplants may be performed. Any transgressions of the law is punishable with imprisonment and a fine of up to 30,000 Dirhams maximum or either one of these punishments. There is a stiffer penalty for repeat offenders.¹⁸¹

IV. GCC Unified Manual for Organ Transfer and Transplant

In the view of the ever-increasing demand for organs,¹⁸² the absence of effective registration systems (although very recently steps in this direction have been taken¹⁸³) and almost no coordination and cooperation between individual hospitals,¹⁸⁴ the need for regional collaboration arose. In the 1990s, the SCOT spearheaded an organ- and information-exchange program between Saudi Arabia, Oman, and Kuwait.¹⁸⁵ Over the following years, other countries in the Arabian Peninsula started their own transplantation programs. Also, in the wake of the economic boom, a high number of expatriate physicians who brought their own schools of medicine with them were employed in public and private clinics. These factors, coupled with other realities such as the high turnover of medical personnel,¹⁸⁶ made it evident that procurement procedures and key-points in legislation would have to be streamlined. In 2006, the Health Ministers of the member states of the Gulf Cooperation Council (GCC) approved the 'Gulf Unified Guide to Organ Transfer and Transplant' (GCC Unified Manual)

¹⁷⁸ See The Declaration of Istanbul on Organ Trafficking and Transplant Tourism, *Clinical Journal of the American Society of Nephrology* 3 (2008), 1227–1231 at 1227 et seq. – Furthermore, this document contains recommendations that should guarantee the protection and safety of living donors; see *op. cit.* at 1229.

¹⁷⁹ Art. 14 UAE Constitution.

¹⁸⁰ Art. 8 Transplant Law, Art. 10(1) Transplant bylaw.

¹⁸¹ Art. 10 Transplant Law, Art. 11 Transplant bylaw.

¹⁸² See *Grundmann*, supra note 77 at 14; *Shaheen & Souqiyeh*, supra note 77 at 20.

¹⁸³ See, e.g., The National (UAE), 18 April 2013: „National database for organ donors will save hundreds of lives, says UAE expert“, available at <<http://www.thenational.ae/news/uae-news/health/national-database-for-organ-donors-will-save-hundreds-of-lives-says-uae-expert>> accessed 15 February 2014; Gulf Times (Qatar), 15 July 2013: „4'000 on Organ Donor Register“, available at <<http://www.gulf-times.com/qatar/178/details/359521/4,000-on-organ-donor-register>> accessed 15 February 2014; Gulf Daily News (Bahrain), 17 June 2013: „Organ Donation Database Hope“, available at <<http://www.gulf-daily-news.com/NewsDetails.aspx?storyid=355498>> accessed 15 February 2015.

¹⁸⁴ See, in this regard, *F.A.M. Shaheen et al.*, Solid Organ Registry: Organization and Structure, *Transplantation Proceedings* 33 (2001), 2641; *A. Naqvi & A. Rizvi*, Registries in the Middle East: Problems and Prospects, *Transplantation Proceedings* 33 (2001), 2640.

¹⁸⁵ – and, to a lesser extent, with Bahrain and Qatar: *Grundmann*, supra note 77 at 14.

¹⁸⁶ In this regard, see *Shaheen et al.*, Current Issues and Problems of Transplantation in the Middle East: The Arabian Gulf, *Transplantation Proceedings* 33 (2001), 2621–2622 at 2622.

issued by the GCC Executive Board.¹⁸⁷ As a member state of the GCC, the UAE is a signatory to this agreement, which includes rules for organ transplant as well as for the definition and diagnosis of death. According to the UAE transplant legislation, the GCC Unified Manual functions as the organ transfer and transplant manual of the country, which may be subjected to amendments if developments in the field of transplant medicine necessitate such a step.¹⁸⁸

In its first part, the GCC Unified Manual stipulates the key principles, which guided the legislature in the GCC states. These include the following fundamentals and minimum requirements:

- Organs may be procured from living and deceased donors;¹⁸⁹
- An individual is considered dead if the irreversible and complete cessation of the cardiopulmonary or brain functions occurs;¹⁹⁰
- Donation must not negatively affect the donor's health, capabilities or lead to her or his death;¹⁹¹
- Any person with full legal capacity may express her or his willingness to donate any of their organs during lifetime or after death in writing (full legal capacity is attained at the age of 18 years or older);¹⁹²
- He or she may at any time prior to organ removal withdraw this consent;¹⁹³
- The donor must undergo a medical examination by a specialised medical team and be fully informed about the consequences of organ donation and possible complications;
- Organs from a deceased donor may only be removed with the prior consent in writing of the donor's family and after verification of death by a committee of specialised physicians;¹⁹⁴
- Organ trafficking is absolutely forbidden and physicians may not proceed with the organ transfer as soon as they become aware of the commercial background of the organ procurement in accordance with the recommendations of the World Health Organisation and the Declaration of Istanbul on Organ Trafficking and Transplant;¹⁹⁵
- Organs may only be transplanted at designated medical facilities licensed in the member states.¹⁹⁶

It is noteworthy that the GCC Unified Manual in principle allows the donation of any organ, as long as the donor's health or life are not jeopardised. In this context it should be remembered that in the UAE, it is illicit to transplant organs or parts thereof that are connected with reproduction from one body to another. Furthermore, in the UAE, the consent of family members to donation must only be obtained if the donor has not expressed during her or his

¹⁸⁷ Health Ministers' Council for the GCC States Decision No. 3/2006.

¹⁸⁸ See Art. 11 Transplant Law, Art. 12(1) and (2) Transplant bylaw.

¹⁸⁹ Art. 2 GCC Unified Manual.

¹⁹⁰ Preamble 'Definitions' GCC Unified Manual.

¹⁹¹ Art. 6 GCC Unified Manual.

¹⁹² Preamble 'Definitions' and Art. 3 GCC Unified Manual.

¹⁹³ Art. 5 GCC Unified Manual.

¹⁹⁴ Art. 3, 7 GCC Unified Manual

¹⁹⁵ Art. 8 GCC Unified Manual.

¹⁹⁶ Art. 9 GCC Unified Manual.

lifetime the willingness to donate organs after death by a written statement in the presence of two witnesses.

The GCC Unified Manual then goes on to list the duties of the Coordination Centers for Organ Transplant,¹⁹⁷ as well as general rules of procedure that must be followed by all hospitals and transplant centers in the member states, such as: the duty of hospitals to report death cases to the coordination center, to verify death according to specified criteria, to provide lists of patients in need of transplantation surgery and follow-up reports after surgery. The Manual furthermore contains conditions and requirements for private hospitals that perform organ transplants. In a second part, specifications for the establishment and administration of transplant centers and conditions for the procurement of organs from deceased and (where applicable, depending on the organ in question) living donors are stipulated, followed by contraindications to transplantation and rules for the allocation of available organs to patients for each of the following organs: kidneys, heart, lungs, liver, cornea. The manual then establishes the standards of viability of deceased donor's organs for transplantation purposes, and specifies the type of care a brain dead person shall receive until organs can be removed for transplantation purposes. The Annexes contain various forms such as the death documentation form, in which the details of the clinical examination for brain death certification are stipulated (Annex 3), consent form (Annex 4), guides to medical tests donors and recipients must undergo (Annexes 5-12), the decision No. 99/1982 of the Council of Senior Ulama of Saudi Arabia, which recognised the lawfulness of both living and deceased donor transplantations (Annex 2), as well as the Resolution No. 17/1986 of the Council of the Islamic Fiqh Academy, which equated legal death to brain death but remained somewhat ambiguous regarding its definition (Annex 1). Likewise, the GCC Unified Manual is not explicit on the definition of brain death, but rather outlines the particulars of the diagnostic process.

V. Conclusion

Over the last few decades, the UAE has undergone a huge economic transformation marked by the development of modern healthcare facilities. Formerly a very isolated region where traditional medicine based on medicinal herbs, age-old practices and spiritual healing were the rule, the region was then visited by missionary doctors until the first hospitals were established in the mid-20th century. After the founding of the UAE in 1971, modern medical services became available and health laws were issued. Although the UAE was one of the first countries on the Arabian Peninsula to issue transplantation legislation, for various reasons, the national transplantation program was only started in 2007. It took another six years and the clarification of the legal definition of 'death' till the first kidney transplantation from a deceased donor was carried out last year. According to the UAE transplantation legislation, which mirrors religious and cultural issues in various respects, organs may be transplanted from a living or dead person to a living recipient. The UAE uses an opt-in system where the explicit consent of donors (or their relatives) is necessary for organ retrieval. Organ transplantation is licit for therapeutic purposes only and the removal of organs that have reproductive functions is banned. Recently, the GCC Unified Manual for Transplantation has become effective. This

¹⁹⁷ See for these and the following rules, *Health Authority Abu Dhabi*, Book 4: Transfer and Transplant of Human Organs, Gulf Unified Guide to Organ Transfer and Transplant in the GCC States, 16–80 at 22 et seq.

guideline aims at unification of procedures and collaboration between the GCC states Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the UAE and Yemen in the field of organ transplantation.