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Between Islamic and Secular Law Regulating Organ Transplantation in the Middle East and North Africa Arezoo Sang Bastian

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Arezoo Sang Bastian

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sui generis, Zurich 2024

Acknowledgements

I would like to thank the following people without whom this work would not have been possible. First and foremost, I would like to express my deepest gratitude to Prof. Dr. iur. Thomas Gächter, the Dean of the University of Zurich's Faculty of Law, for reviewing my dissertation as primary reviewer. My deepest appreciation also to Prof. Dr. iur. utr. Brigitte Tag for her secondary review.

I am deeply indebted to Prof. Dr. iur. Dr. h.c. Andrea Büchler who has unfortunately not been able to review this dissertation after having been my supervisor during my time as an assistant at her Chair due to unforeseen illness. Prof. Büchler and her research inspired the topic of this dissertation at the interface of Islamic and medical law. She encouraged me not to shy away from ethically challenging topics and provided me with her expertise and knowledge.

I would also like to extend my gratitude to all my peers who helped me along my journey of intellectual growth. I would like to especially mention Marisa Beier, Nicole Nickerson, Youlo Wujohktsang and Julia Meier. I had the pleasure of working with them on many projects during our time as junior researchers at the Faculty of Law and thank them for always offering me their moral and intellectual support. Special thanks also to my colleagues and peers with whom I worked with at the Chair for their support and friendship. I am also grateful to the Management Office and the Vice Dean of Research and Academic Career Development Prof. Dr. iur. Dr. h.c. Helmut Heiss for the financial support of this work's professional proof-reading.

I am also sincerely thankful to Matthias Emery for not only carefully reading the manuscript and providing me with critical feedback but also for emotionally supporting and encouraging me in this journey. Lastly, I would be remiss in not mentioning my parents, sisters and friends. Their belief in me has kept my spirits and motivation up during this process.

This dissertation was accepted by the Faculty of Law, University of Zurich, in October 2023. Laws and literature were considered until April of 2023.

Zurich, November 2023 Arezoo Sang Bastian

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Glossary

(- 1		
ʿāda	custom	
akhlāq	'philosophy or ethics'	
<i>al-yaqīn la yazūl bi shakk</i> – 'certainty is not removed by doubt'		
ʻaql	human reasoning or intellect	
<i>darūra</i>	necessity	
faqīh	jurist	
fard	compulsory	
farḍ kifāya	collective duty	
fiqh	Islamic Jurisprudence	
fițra	primordial natural state	
furūʻ	'branches of law'	
ḥadīth	collected traditions of Prophet Muḥammad	
ḥarām	forbidden	
hijra	migration	
<u>ḥurma</u>	dignity or sanctity	
ʻibādāt	rituals or acts of worship	
ibāha	'permission in principle'	
ihāna	degradation	
ijmā'	consensus of legal scholars	
ijtihād	independent reasoning	
ʻilm	knowledge	
ʻilm al-ḥadīth	the science of the hadīth	
imām	head of community	
isnād	'chain of narrators'	
istiḥsān	'considering something to be better'	
istishāb	continuance	
istişlāh	'considering the universal good'	
jāʾiz	permitted	
, karāma	dignity	
khalīfa	caliph	
<i>khulafāʿ al-rashīdūn</i> – rightly guided caliphs		
kitāb	book	
<i>la ḍarar wa la ḍirār –</i> 'no harm, no harassment'		
makrūh	reprehensible	
mandūb	recommended	
maqāsid al-sharīʿa – goals of sharia		
<i>marja'al-taqlid</i> – 'model' or 'source of imitation'		

mașlaḥa	universal good, public interest, or human welfare	
matn	topic or 'tradition'	
muʿāmalāt	social relations	
mubāķ	permitted	
muftī	jurisconsult	
mujtahid	legal scholar	
mujtahid mutlaq – 'absolute' mujtahid		
muqallid	'followers' of the mujtahid mutlaq	
mustaḥabb	recommended	
	mutilation	
qānun	law	
qiyās	analogy or deductive analogy	
sadd al-darā'ī – 'blocking the means'		
şaḥāba	the Prophet's companions	
shar' man qablanā – 'norms of those before us'		
shīʻa	party	
siyāsa	governance	
sunna	tradition	
taqlīd	imitation	
ummah	universal community	
ʻurf	'customary law'	
uşūl	roots	
wājib	compulsory	

Part I

Introduction

I. Background

For centuries, territories with Muslim rulers were governed according to law derived from Islamic sources by legal scholars using the methods of Islamic legal jurisprudence. Law was enacted and enforced by either a judge or a state official. This legal system changed fundamentally after the 18th century with the growing influence of Europe. States governed by Muslim rulers were confronted with European culture, including European legal systems, laws, and codes, mainly through colonialization. In most legal fields, such as criminal, commercial, and administrative law, the existing laws and rules derived from Islamic law were abolished and replaced with European or European-inspired statutes and codes. Laws in the field of personal status law, family law, and succession law that were not abolished are still considered to be derived from classical Islamic law, which developed between the 5th and 11th centuries.

When describing the legal systems and laws of today's Muslim-majority states in the Middle Eastern and North African (MENA) region, scholarship on Islamic law has identified two categories of laws: one derived from Islamic law, which includes contemporary personal status laws, and the other derived from non-Islamic law of primarily European origin, referring to all other legal fields.

Following this widely received and reproduced notion, biomedical laws such as organ transplantation laws would be placed in the latter category with no connection to Islamic law. The literature finds that the laws on organ transplantation in Muslim-majority states generally follow internationally set legal standards because of structural, technological dependence on the West. This dependence has drawn in the values and mentalities conveyed through biomedical technology, resulting in the homologation and assimilation of health principles, regulations, and codes.¹ This observation corresponds with the systematics of modern law in the Islamic world: everything that has not been regulated by classical Islamic law, including all areas that are novel and therefore lack exact precedents, such as organ and tissue transplantation, can and

¹ See Dariusch Atighetchi, *Islamic Bioethics: Problems and Perspectives* (Dordrecht: Springer, 2009), 23.

are regulated by the legislative authority in place. The states legislate according to their procedures and based on their fundamental legal sources.

Biomedical laws are genuinely a novel field of law, made necessary by unprecedented developments and advances in the sciences and technology in the 20th century. This cross-sectional field combines various legal branches of private and public law while influencing and being influenced by political, ethical, and religious debates and discourses on the relation between human life and technology. Biomedicine is a field of research and clinical practice concerning all life processes with the aim of preserving life, treating illnesses and diseases, and alleviating suffering. As much as these technologies have enhanced human life, they have also raised serious ethical questions. Should something that is technically feasible also be implemented in reality? Where do the boundaries lie when using technology to manipulate human bodies and lives?

To provide authoritative guidelines on addressing these questions, states worldwide have begun to legislate this field. Muslim-majority states are no exception to this trend. Biomedical research and practice have spread all over the world since the modern medical paradigm achieved global predominance. This work's focus is on organ transplantation. The scientific and technical advances that laid the ground for successful organ transplantations began in the early 1900s. The history of transplantation medicine is young, and the developments leading to the establishment of organ and tissue transplantation as a standard form of treatment have been rapid and outstanding. Many attempts were made to transplant solid organs before the first successful transplant was performed in 1954 in the USA with a kidney donation between twin brothers. In the 1960s, the first liver, lung, and heart transplants were performed with organs from deceased donors. Several breakthroughs in vital areas, such as the development of immunosuppressants, techniques of vascular anastomosis, effective preservation of donated organs, and temporary maintenance of recipients with dialysis and cardiopulmonary bypass, were critical for advancing this form of treatment beyond experimental status. The legal acceptance of the concept of brain death in many countries and changes in social attitudes should not be underestimated in this success story.

With these rapid medical advances, ever more patients needing transplants are also available for treatment. It is often observed that organ transplantation has become a victim of its own success: The number of donor organs available for transplants has not kept pace with the number of organs needed, leading to a worldwide shortage of organs. The WHO estimates that less than 10% of the global demand can be met.² This concern has been an essential driver for states to regulate the handling of organs. Donation, procurement, and transplantation of human organs involve various ethical issues. Who owns the body, and does a person have unlimited rights over the disposition of their body? When is a human being considered dead? Can one derive monetary gain from selling part of one's body? Assuming that a person has the authority to dispose of their body and therefore donate their organs, various subsequent questions arise, such as in which form consent must be given, whether consent can be assumed, and what the role of family and relatives is. Additionally, the crucial question of organ allocation must be addressed, such as the criteria for ensuring just allocation.³

Beauchamp and Childress have provided a way of approaching these ethical issues by introducing four bioethical principles, which have proven to be hugely influential within the medical profession and in the development of medical laws.⁴ The four principles are those of autonomy, non-maleficence, beneficence, and justice. These principles are considered by many as the standard theoretical framework from which to approach a bioethical issue and to reach a solution suitable for the specific case.

Simultaneously, legal discourse in Muslim-majority states on biomedical issues is conducted against the background of Islam. The Islamic legal tradition based on the Quran, perceived as the literal Word of God, is the sharia, the divine law, and the most critical legal interpretations developed over centuries in classical jurisprudence play an essential role in bioethical discourse. Believers needing a rule of conduct frequently ask scholars or experts of Islamic law to issue a juridical opinion, called a fatwa, to explain the prescriptions in the sources that indicate how to handle a specific conundrum. These fatwas are produced by private legal and state-appointed scholars and are technically nonbinding. Nonetheless, the influence of these opinions on legislation must be considered because they have a broad reach in various societies and even enjoy popularity, especially with the rise of mass media.⁵

Muslim believers have turned to religious scholars to understand the sharia on organ and tissue transplantation. The questions that these scholars deal with on organ transplantation and donation are whether an organ should be removed from a living or dead person, whether a body part from the dead

³ See Andrea Büchler, "Regulating the Sacred: Organ Donation and Transplantation: Autonomy and Integrity of the Person or Social Responsibility of the Body?," *Straus Institute Working Paper* 1 (2012).

⁴ Tom Beauchamp and James F. Childress, *Principles of Biomedical Ethics*, 8th ed. (Oxford: Oxford University Press, 2019).

⁵ Morgan Clarke, *Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon* (New York: Berghahn, 2009), 67.

defiles the body of the living, and at what moment death occurs. Working from the general ethical concepts of Islam, most religious scholars have decided that Islamic law permits organ transplantation. The religious-legal opinions range from positions that declare all forms of donation to be prohibited by the religious-legal tenet that the human body belongs to God to positions that claim all forms of donation to be permissible. These positions also refer to religious law, specifically to a sura in the Quran that says 'if anyone saved a life, it would be as if he saved the life of the whole people' (Quran [5:32]).⁶

II. Research Question

A certain ambivalence is found in the literature on the various categories of laws in today's Muslim-majority states. Novel legal areas such as organ transplantation are categorized as laws that do not have any connection to Islamic law since they have not been regulated by classical Islamic law. In contrast, organ transplantation is inherently connected to Islamic law because Islam considers itself to encompass all aspects of life. Islamic legal scholars consider this subject from an Islamic legal perspective by giving rulings on the permissibility of this practice.

This ambivalence raises the question of whether the notion that novel laws have no connection to Islamic law can be upheld. And if not, what would be the consequences for the theory that two distinct categories of laws exist, one based on religious law and one with no connection to religious law? Would this mean that there are no distinct categories of laws in states of the MENA region as claimed in scholarship or that there is a third category of law?

The questions that will lead the following research are these: Which legal principles and concepts form the basis of organ transplantation laws in the MENA-region? Are these principles and concepts of Islamic legal origin, or are they derived from international legal documents? What role does the Islamic legal tradition play in shaping and developing these laws? What is the influence of international legal instruments and other international bioethical and legal discourses in the formation of organ transplantation laws?

III. Aim and Relevance

All Muslim-majority states of the MENA region have regulations on organ transplantation. The selection of states followed three rationalities. Seeing that such

⁶ The Quran translations in this work are mine, made with the aid of Abdullah Yusuf Ali, *The Meaning of the Holy Qur'an*, 11th ed. (Beltsville: Amana Publications, 2011).

delineations are inherently arbitrary, the author decided to follow the established practice, which considers the MENA region as its own historio-sociological entity. The second reason is the shared cultural background of MENA states making comparison feasible and meaningful. The third reason lies in the capabilities of the author who feels that such an analysis would be difficult without recourse to primary sources in their original language. This in turn limits the scope of the analysis to Arabic and Persian and thus to the MENA region.

This research specifically examines organ transplantation laws. Using organ transplantation laws, the research aims to show that some legal fields in MENA states fall outside the two categories described in the literature. This finding would mean that a strict dichotomy between Islamic and non-Islamic laws, as claimed in scholarship, does not exist and that there are laws comprising legal elements from different legal traditions.

In Muslim-majority states, the belief endures that the law should be in accordance with sharia. Successful political movements in MENA states, the neo-revivalist and Islamist movements, have popularized this belief. For Islamists, authoritative Islamic law is rooted in the early period of Islam, and Muslims today should act by the law of the early Muslims. Therefore, Islamists reject the secularization of today's societies and states and call for a 'return to sharia' and a renewed commitment to Islam as the basis of society, politics, and law. This conception has led to divisions in various societies because Islamists believe Islamic and non-Islamic values are antagonistic and incompatible, leading to a clash of values.⁷ The findings of this research can contribute to overcoming and diffusing the widespread notion of a 'return to sharia'.

IV. Course of Research

The thesis consists of three parts. The first part introduces the foundations of Islam and Islamic jurisprudence and law. After the introduction, the literature characterizing Islamic law before and after the European encounter is presented, including a critique of the characterization prevalent in the literature.

The second part of the thesis introduces organ transplantation from a medical and historical perspective. Furthermore, general and specific bioethical principles are detailed. Special attention is paid to the *WHO Guiding Principles on Human Cell, Tissue and Organ Donation* as an international legal instrument to understand which elements are considered necessary for ethical

See Ira M. Lapidus, "Islamic Revival and Modernity: The Contemporary Movements and the Historical Paradigms," *Journal of the Economic and Social History of the Orient* 40, no. 4 (1997).

regulation of organ transplantation. Following the *WHO Guiding Principles* introduction, organ transplantation is evaluated from an Islamic perspective. The general Islamic legal tradition on medicine and ethics is introduced. Further, the fatwas establishing the legal and ethical handling of organ transplantation issues are analysed and depicted. Islamic legal opinion is presented from secondary literature, because access to primary literature proved to be difficult when performing research from outside the Islamic world.

The third part examines the organ transplantation laws of the following Muslim-majority states of the MENA region: Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Bahrain, Oman, Yemen, Jordan, Syria, Iraq, Lebanon, Iran, Egypt, Libya, Tunisia, Algeria, and Morocco. Each state's legislation is then assessed in light of Islamic legal rulings expressed in fatwas and the *WHO Guiding Principles*, representing the international legal standard in organ transplantation regulation. Finally, the results of the research are presented in the conclusions.

Part II

Islamic Law

I. Introduction

Islamic law is a general designation for Islamic normativity, the rules and regulations that govern the lives of Muslims and are derived from religious sources, the Quran and the *ḥadīth* (collected traditions of Prophet Muḥammad). The term Islamic law can bear different connotations depending on the context of its use in the literature. When used in connection with sharia or sharia law, Islamic law indicates the God-given, the sacred, the absolute, and the unchangeable, because in the Islamic legal tradition, sharia is understood to be a way or path that is divinely appointed.⁸ The term Islamic law can simultaneously bear the connotation of the erroneous, the changeable, and adaptable when used in connection with *fiqh*⁹ (Islamic jurisprudence), which signifies scholarly discussions to understand divine law. The scholars of *fiqh* explain, elaborate on, and interpret the sharia, the divine law. Only in this interpretative effort does God's revelation and law become accessible to human understanding. Another connotation that can be found in the literature refers to Islamic law as a legal system, such as the common or civil law system, for states that come from an Islamic tradition.¹⁰

The Islamic legal tradition is still present today as a religious and cultural phenomenon. For Muslim believers, Islam is seen as 'a life system that interweaves religion and politics, the sacred and profane, the material world and the spiritual sphere'.¹¹ Therefore, the sharia is understood to have an all-embracing influence from the sphere of the private through the social and political to the religious life of the believer.¹²

8 Quran [45.18]: 'We have set you on a *sharī*'a of command, so follow it'.

- 10 N. Calder and M. B. Hooker, "<u>Sh</u>arī'a," in Bearman et al., *Encyclopaedia of Islam, Second Edition*.
- 11 Atighetchi, Islamic Bioethics, 1.
- 12 Atighetchi, Islamic Bioethics, 1.

⁹ F Arabic and Persian words are transliterated according to the systems of the International Journal of Middle East Studies (IJMES). A few changes have been made in the interest of readability. Especially with names and terms that are current in English usage, a simplified spelling has been used, or the transliteration has been modified. The Arabic article al- is used even in cases where it diverges from the actual pronunciation. The singular form of Arabic terms are preferred.

The following chapter provides an overview of the emergence of Islamic law and the legal theory that Muslim scholars developed from religious sources. To better understand the concept of Islamic law, especially its connection to sharia and *fiqh*, the history of Islam is examined from its emergence to its establishment and the development of legal jurisprudence and laws from religious sources.

The chapter also discusses the lasting changes that Islamic law experienced after its encounter with European legal culture and the emergence of modern nation-states by recounting the scholarly debate on Islamic law and its role in Muslim states today.

II. Early Development and Foundations of Islamic Law

1. Emergence of Islam

According to Islamic tradition, the Prophet Muhammad received God's revelation from 610 to 632 CE first in Mecca and later in Medina. Muhammad's recitation of the revelation is called the Ouran, written down after Muhammad's death to become the fixed holy Muslim scripture. Muhammad had struggled to preach God's message in Mecca for almost ten years. In 622 CE the Meccan elite forced Muhammad and his followers to flee to Medina after Muhammad's rejection of polytheism was seen to threaten their religious prestige as keepers of the Kaaba, the religious shrine for the tribal idols. Muhammad's claim to Prophetic authority and leadership and his insistence on all believers belonging to one ummah (universal community) that transcended tribal bonds undermined the Meccan tribal political authority. The hijra (migration) to Medina marked a turning point in Muhammad's life, and a new chapter began in the history of the Islamic movement. Muhammad became the leader of the newly emerging Islamic community, and Islam took a political form. The creation and establishment of the Islamic community prompted new situations and tasks requiring a legal order, which also found expression in the subject matter of the revelations that he received in his time in Medina.13 When Muhammad died, all Arabia was united under Islam. The rapid Islamic expansion continued after his death. In a few decades, the Islamic Empire reached from the Iberian Peninsula to the Indus.14

¹³ A. T. Welch, R. Paret, and J. D. Pearson, "Al-Kur'ān," in Bearman et al., Encyclopaedia of Islam, Second Edition, John L. Esposito, Islam: The Straight Path, 4th ed. (New York: Oxford University Press, 2011), 8-11.

¹⁴ Mathias Rohe, *Islamic Law in Past and Present* (Leiden: Brill, 2015), 25; Esposito, Islam, 8, 10.

2. Schism Between Sunni and Shia

Disagreement over Muhammad's rightful successor or khalifa (caliph) led to the most fundamental schism in Islam, which also bore legal consequences. A shī'a (party) supporting 'Alī, Muhammad's cousin and son-in-law as the head of the community, claimed that the Prophet appointed 'Alī as his successor not long before his death. This party saw only a member of the Prophet's closest family as a person suited to the office of caliph. However, most of Muhammad's community believed the succession to be unresolved after his death. Therefore, Abū Bakr, Muhammad's comrade-in-arms, was appointed the first caliph (r. 632-634 CE). His appointment was understood to be an action following the sunna (tradition or custom), hence the name 'Sunni'. The three subsequent caliphs, 'Umar (r. 634-644), 'Uthman (r. 644-656), and 'Alī (656-661), were appointed following this tradition. After 'Alī's death, the Sunni majority supported Muʿāwiya to succeed to the office of the caliph and founded the Umayyad dynasty in Damascus. This dynasty ruled there until the middle of the 8th century and in the Iberian Peninsula until the end of the 10th century. In contrast, the Shiites retained their view of 'Ali's (and thus Muhammad's) male descendants as their imām (head of community and ruler).¹⁵ The so-called Twelver Shia, which is the largest branch of Shia Islam, believe the Prophet to have had twelve divinely ordained successors, 'Alī and his eleven male descendants, with the last imām living in occultation.16

3. Schools of Law

During his lifetime, Muḥammad had the sole authority to comment and interpret Quranic revelation and to settle disputes. His explanations, given while making ad hoc decisions about problems and questions that were brought to him, contributed to the growth of a legal structure from the ethical principles of the Quran.¹⁷ His deeds and sayings came to be known as Muḥammad's *sunna* (tradition) and were compiled into *ḥadīth* works (collected traditions of the Prophet Muḥammad), which are also sources of Islamic law.¹⁸

18 More on *sunna*, see, chapter II.4.1b.

¹⁵ Heinz Halm, *Die Schiiten*, 2nd ed. (Munich: Verlag C.H.Beck, 2015), 11-15.

¹⁶ W. Madelung, "Al-Mahdī," in Bearman et al., *Encyclopaedia of Islam, Second Edition* Occultation in Shia Islam refers to the eschatological belief that the last *imām*, also called as Mahdī, has alread been born but was subsequently conceals by God only to reemerge to establish justice and peace on earth at the End of Time.

¹⁷ Noel J. Coulson, *A History of Islamic Law* (Edinburgh: Edinburgh University Press, 1964), 21-22.

After Muhammad's death, the process of formalization, institutionalization, and self-authorization of Islamic law was driven by the fact that neither the Quran nor the prophetic tradition covered all areas of life and that gaps remained. Legal scholars gradually developed a supplementary collection of legal sources and instruments to derive laws. This formalization and institutionalization of the Sunni legal doctrine took place in the various madhhab (schools of law). In the beginning, the schools shared a body of common doctrine and the essentials of a legal theory which had as its central idea the 'living tradition of the school' or 'well-established precedent'. This living tradition is represented by the *ijmā*' (consensus), which is the common doctrine of most of the representative religious scholars of each school centre. Over time, the doctrines became attributed to the individual and most prominent scholars. The most important Sunni schools of law are the Hanafite school, after Abū Hanīfa (699-767 AD); the Malikite school, after Mālik ibn Anas (713-795 AD); the Shafi'ite school, after Mālik's pupil Muhammad ibn Idrīs al-Shāfi'ī (767-820 AD); and lastly, the Hanbalite school, after Ahmad ibn Hanbal (780-855 AD).¹⁹ The schools emerged and spread in certain regions. The Hanafite school started in Iraq and spread to Central Asia, the Ottoman Empire, and the Mughal Empire in India. The Malikite school began in Medina and is today predominant in the Maghreb. Shafi'ites are mainly found in Egypt, Syria, East Africa, and South East Asia. The Hanbalite school is today found mainly within the Arabian Peninsula, 20

Shia Islam, the second-largest branch of Islam, formed Shia-specific schools of law. The Twelver Shia, the largest branch of Shia Islam today, is divided into two schools of law, the *'Usūlī* and the *Akhbārī*. The development of the Shia schools of law is closely linked to the development of the Sunni schools. Many Shia scholars studied in the formative period under Sunni teachers, and they developed their doctrine in critical debate with the Sunnis and their understanding of state and law.²¹

4. Uṣūl al-fiqh or Dogma of the Legal Sources and Methods of Legal Deduction

In the Islamic legal tradition, sharia is given an all-embracing influence, from the private, social, and political spheres to the religious life of the believer.

¹⁹ I. Goldziher and J. Schacht, "Fikh," in Bearman et al., *Encyclopaedia of Islam, Second Edition*; Rohe, *Islamic Law in Past and Present*, 35.

²⁰ See Christopher Melchert, *The Formation of the Sunni Schools of Law: 9th-10th Centuries C.E.* (Leiden etc.: Brill, 1997).

²¹ Rohe, Islamic Law in Past and Present, 38.

Islam is therefore seen as being 'a life system that interweaves religion and politics, the sacred and profane, the material world and the spiritual sphere'.22 However, God's law is not a priori understandable and needs to be interpreted by fūqahā' (scholars of law) through methods developed in figh, the science of religious law or Islamic jurisprudence.²³ These methods of legal deduction and their sources are developed in the part of *figh* that is called *usul al-figh* (roots of law). Figh also comprises the body of norms derived from the uşūl (roots), which is called fur \bar{u} ('branches of law').²⁴ The fur \bar{u} 'are traditionally divided into the two major branches: 'ibādāt (rituals or acts of worship) and muʿāmalāt (social relations). Each branch covers a range of subjects, such as politics, economics, military matters, the family, and crime.²⁵ Each subject also encompasses many different minor issues. The subject of economics, for example, covers sales, guarantees, partnerships, gifts, and bequests. Juristic works are traditionally arranged as a sequence of these smaller topics, each called a kitāb (book).²⁶ In figh, human acts are categorized not only into permitted and prohibited acts but into five categories: fard or wājib (compulsory), mandūb or mustahabb (recommended), jā'iz or mubāh (permitted), makrūh (reprehensible), and harām (forbidden).27

The sources of Islamic jurisprudence that prevail to this day in Sunni Islam are based on Shāfiʿī's work. This scholar lived at the beginning of the 9th century.²⁸ He established four sources for the derivation of law:²⁹ the first source is the Quran, the second is the *sunna* (tradition) of the Prophet, the third is *ijmā*ʿ (consensus of legal scholars), and the last source is *qiyās* (deductive analogy).³⁰ Rules based on the sharia can also be a product of *ijtihād* (independent reasoning) or in other words a product of *fiqh*. *Ijtihād* can be defined as a

22	Atighetchi, Islamic Bioethics, 1.
23	Fuqahā', sing. faqīh (religious legal scholar) is derived from the same root as fiqh.
24	Goldziher and Schacht, "Fikh."
25	Fiqh as a term is also used to designate the result of deduction from the sources of law.
26	Wael B. Hallaq, <i>Shariʿa: Theory, Practice, Transformations</i> (Cambridge: Cambridge University Press, 2009), 28-30.
27	Mohammad Hashim Kamali, <i>Principles of Islamic Jurisprudence</i> , 3rd ed. (Cambridge: Cambridge Islamic Text Society, 2011), 39-40.
28	Wael B. Hallaq, <i>The Origins and Evolution of Islamic Law</i> (Cambridge: Cambridge University Press, 2006), 122 ff; Devin J. Stewart, <i>Islamic Legal Orthodoxy: Twelver Shiite Responses to the Sunni Legal System</i> (Salt Lake City: University of Utah Press, 1998), 30ff.
29	G.H.A. Juynboll and D. W. Brown, "Sunna," in Bearman et al., <i>Encyclopaedia of Islam, Second Edition</i> .
20	Tilman Nagal Dasislamischa Bacht, Fing Finführung (Westhofon, WVA-Verlag Skulima

30 Tilman Nagel, Das islamische Recht: Eine Einführung (Westhofen: WVA-Verlag Skulima, 2001).

process of legal reasoning and hermeneutics through which the jurists derive or rationalize law from the Quran and the *sunna* to answer a legal question.³¹

The following chapters introduce the four sources of Islamic law and essential methods of legal deduction in Islamic jurisprudence.

4.1 The Four Sources of Islamic Law

a Quran

The first source of the law is the Quran.³² According to inner-Islamic views, the Quran was initially preserved only orally. Muḥammad's companions wrote the revelations down and collected and compiled the recordings after his death. The third caliph, 'Uthmān, established the standard version of the Quran that is used and widely known today.³³

After a lengthy theological debate, the Quran came to be seen as eternal, in contrast to created, and perfect and inimitable. This validation has influenced Muslim life in all its facets and continues to do so. The doctrine of eternity and inimitability contributed to the Quran being the first source of law.³⁴ However, the Quran should not be seen as a code of law or law book even if, according to its own statement, it teaches justice.³⁵ The Quran's content comprises statements about God and his prophets, human and spiritual being, creation and life after death, interpretations of the world, faith and ethical subjects, religious commandments and prohibitions, and historical events of Muḥammad's time. Only a small proportion of the Quran contains normative statements. Around 500 verses of a total of 6,236 verses in the Quran can be categorized as having legal content, mainly in the fields of criminal and civil law, including expressions on penalties, inheritance, marriage, familial relations, and alms taxes.³⁶

b Sunna of the Prophet

The second legal source is the *sunna* of the Prophet. At the beginning of the formative period of Islamic law, the term *sunna* referred to the practice and traditions of Muḥammad, his companions, and the general practice of the community in Medina. Later, the *sunna* became associated mainly with

31	Intisar A. Rabb, "Ijtihād," in <i>The Oxford Encyclopedia of the Islamic World</i> , ed. John L. Esposito (Oxford: Oxford University Press, 2009).
32	The sources of the law and the instruments for deriving deducing laws are a result of juristic reasoning.
33	Welch, Paret and Pearson, "al-Ḥurʾān."
34	Welch, Paret and Pearson, "al-Ḥurʾān."
35	See e.g., Quran (4:135); (5:8); (7:29).
36	Wael B. Hallaq, A History of Islamic Legal Theories: An Introduction to Sunnī, Uşūl Al-Fiqh' (Cambridge: Cambridge University Press, 2007), 3.

Muḥammad's traditions: his acts, deeds, and sayings. For Sunnis, the practices of Muḥammad's companions and successors, the first four *khulafāʿal-rashīdūn* (rightly guided caliphs) are often included in the term *sunna*.³⁷ The *sunna* that Twelver Shiites believe to be authentic are the Prophetic traditions and the normative practices of the twelve *imām*, the political and religious successors of Muḥammad; some also include Muḥammad's daughter Fāṭima, the wife of the fourth caliph, 'Alī. The sunna of the first three caliphs is rejected by Shia juris-prudence because only 'Alī is believed to be the Prophet's rightful successor.³⁸

The deeds and words of the Prophet were gradually collected and compiled into hadith.³⁹ By the end of the 9th century, the 'ilm al-hadith (the science of the *hadith*) had established itself. The challenge for legal scholars was to verify the various hadith as authentic. To address the danger of falsification, hadīth science attributed a isnād ('chain of narrators') to every single matn (topic or 'tradition') in order to verify who had reported the content of a matn. The chain of narrators, supported by wide-ranging genealogical knowledge, served to verify or falsify the authenticity of the tradition.⁴⁰ Thus, a scale of degrees of rank of the authenticity of traditions evolved based on the number and structure of the chains of transmitters and on the trustworthiness of the individual narrator.⁴¹ The most trustworthy tradition, the sunna mutawātira, can be traced back to a great number of the Prophet's companions and were transmitted without interruption via numerous chains of narrators. The wellknown tradition, the sunna mashhūra, is weaker because it goes back to only one or a few of the Prophet's companions but was transmitted via many transmitters. The weakest grade of trustworthiness is the sunna al-ahad, which neither can be related to a great number of the Prophet's companions nor are based on a significant number of narrators.⁴² This grade includes the majority of the hadith.43 The difference for the Shia, in this case, is that the narrators who had supported the appointment of the three first caliphs are excluded.44

37	Rohe, Islamic Law in Past and Present, 67	7.
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38 Stewart, Islamic Legal Orthodoxy, 243; Heinz Halm, Der schütische Islam: Von der Religion zur Revolution (Munich: Beck, 1994).

³⁹ The standard collections used by the Sunnis to this day are the 'six books' by Bukhārī, (810-870), Muslim (820-875), Abū Dāwūd (817-889), Ibn Mājā's (824-886), Tirmidī's (824-886) and Nasā'ī's (830-915). The Shi'a use the 'four books' composed in the 10th and 11th centuries by al-Kulyanī', Ibn Bābawayh al-Qummī and al-Šayh al-Ţūsī, see Rohe, *Islamic Law in Past and Present*, 68; Halm, *Die Schiiten*, 64.

⁴⁰ Rohe, Islamic Law in Past and Present, 68-69.

⁴¹ Coulson, History of Islamic Law, 105.

⁴² Hallaq, *Sharīʿa*, 94-95.

⁴³ Melchert, Formation of the Sunni Schools, 179, 199.

⁴⁴ Halm, Der schiitische Islam, 52.

c Ijmāʻ

The third source of law is $ijm\bar{a}$ (consensus of legal scholars). According to Shāfi'ī, whose works are the basis of the four sources of law, the agreement of scholars of a particular locality cannot have authoritative character; only the consensus of the entire Muslim community represented by legal scholars is valid.⁴⁵ *Ijmā* 'has been much debated. It is unclear what the actual modalities of establishing consensus on a particular issue are, who is a party to such a decision, or whether the consensus is binding for future scholars.⁴⁶ The minimum consensus among Islamic legal scholars is to grant binding character to $ijm\bar{a}$ 'decisions by the Prophet's companions and $ijm\bar{a}$ 'decisions by jurists until the 11th century.⁴⁷

d Qiyās

Sunni jurisprudence considers $qiy\bar{a}s$ (analogy) as the fourth source of the law.⁴⁸ However, $qiy\bar{a}s$ is technically a method of logical reasoning, and the classification as a source should not be taken in a literal sense. It is a source insofar as it leads by legal reasoning to the discovery of law derived from the Quran, the $had\bar{a}th$, and the $ijm\bar{a}$ of legal scholars in matters that were not yet regulated in the formative period of Islamic law.⁴⁹ $Qiy\bar{a}s$ includes not only conclusion by analogy but also arguments *a minore ad maius*, *a maiore ad minus*, *a fortiori*, and *e contrario*-basically the entire range of juristic argumentation.⁵⁰ The essential constituent element of an analogical argument is that the point of law that requires a legal solution in a new case and the point of law in the original case are comparable. Furthermore, the *ratio legis* of the original case must be transferrable to the case in need of adjudication.⁵¹

4.2 Ijtihād

According to Hallaq, the establishment of the four sources of law was the synthesis of the dispute between the *ahl al-ra'y* (adherents of *ra'y*) and the *ahl alhadīth* (adherents of the *hadīth*). The two currents debated how to fill the legal gaps left by the Quran. The first current used *ra'y*, an opinion arrived at using

45	Coulson, History of Islamic Law, 59.
46	Hallaq, History of Islamic Legal Theories, 75.
47	From the 11 th century onward, scholars began to act according to the doctrine of <i>taqlid</i> , in which the opinions and consensus of earlier scholars were adopted without criticism. For more on <i>taqlid</i> , see II.4.2.
48	Parts of the Hanbalite school reject <i>qiyās</i> as a source, see Rohe, <i>Islamic Law in Past and Present</i> , 80.
49	Hallaq, History of Islamic Legal Theories, 83.
50	Rohe, Islamic Law in Past and Present, 79.
51	Hallaq, History of Islamic Legal Theories, 83.

'ilm (knowledge) to practice *ijtihād* (personal reasoning). In contrast, the *ahl al-ḥadīth* held the Quran and the *sunna* of the Prophet to be the only authority in legal matters and opposed using *ra'y* to fill legal gaps because *ra'y* allowed too much personal freedom in the interpretation of norms. ⁵² Hallaq posits that this debate was resolved with a synthesis that allowed human legal reasoning but only in the form of *qiyās* (analogical reasoning). ⁵³ From this point forward, *ijtihād* became dissociated from the term *ra'y*. The role of juristic reasoning came to be seen as subordinate to the divine revelation and prophetic *sunna*, at least in the Sunni branch of Islam. ⁵⁴

In its technical sense, *ijtihād* can be defined as a process of legal reasoning and hermeneutics through which the jurist derives or rationalizes law from the Quran and the *sunna* to answer a legal question. The authority to exercise *ijtihād* is given to the *mujtahid* (legal scholar).⁵⁵ A *mujtahid* is a *faqīh* (jurist) or *muftī* (jurisconsult) who extracts a rule from the subject matter of revelation while following the principles and procedures of legal theory. According to Sunni theory, *ijtihād* requires knowledge of the Arabic language; revealed and authoritative texts; the principles of *uṣūl al-fiqh* (roots of law), which elaborates the interpretative principles of legal language such as the imperative, ambiguous, metaphorical, general, and particular; the methods of investigating the authenticity and transmission of the *ḥadīth*; hermeneutical principles; the governing rules of consensus; and legal epistemology.⁵⁶

After the 11th century, Sunni legal literature asserted different rankings to jurists according to their ability to practice *ijtihād*. The founders of the legal schools were credited with the distinction of being a *mujtahid muṯlaq* ('absolute' *mujtahid*) because they were able to derive positive rules and to develop rules of methodology that were to dominate their respective schools. Each school has *mujtahid* who follow the methodology of the school's founder, the *mujtahid muṯlaq*, while having the competency to proffer new rules based on legal assessments for novel cases.⁵⁷ The lowest rank is given to the *muqallid* ('followers' of the *mujtahid muṯlaq*), the lay believer. When confronted with a legal question, a *muqallid* cannot deduce law from textual evidence. Their access to the law is restricted by referring to the reasoning of the *mujtahid* whose opinion they are obliged to follow.⁵⁸

52	Hallaq, History of Islamic Legal Theories, 15.
53	Hallaq, <i>Sharīʿa</i> , 51ff.
54	Coulson, History of Islamic Law, 60.
55	Rabb, "Ijtihād."
56	Hallaq, History of Islamic Legal Theories, 82, 117; Rabb, "Ijtihād."

57 Rabb, "Ijtihād."

⁵⁸ Hallaq, History of Islamic Legal Theories, 117.

ljtihād can traditionally not be applied to particular Quranic texts that unambiguously state the legal rules. This quality is only awarded to a few cases, such as the duty to pray and to pay alms-tax. In addition, cases that became subject to *ijmā*[°] were excluded from *ijtihād*. In all other aspects of the law, *ijtihād* is admissible and is considered a *farḍ kifāya* (collective duty) to those learned enough to be capable of performing it.⁵⁹

In Shia jurisprudence, *ijtihād* has an important standing. Shia jurisprudence rejects $qiy\bar{a}s$ (analogical reasoning) as the fourth source and instead acknowledges 'aql (human reasoning or intellect) as a source of law. *Ijtihād* has been employed as a method of dialectical reasoning using 'aql throughout history and is today the dominant jurisprudential approach in the major Shia school of thought, the *Ja*'fari.⁶⁰

Here, some important methods are introduced that are applied as part of *ijtihād* to derive legal rulings.

a Istiḥsān, Þarūra and Istiṣlāh

Istihsān ('considering something to be better') and istislāh ('considering the universal good') are methods of reasoning discussed in Islamic jurisprudence in connection with qiyās (analogy). Istihsān allows divergence from qiyās. This method allows the preference of another legal argument, in which a particular piece of textual evidence gives rise to a conclusion different from that which would have been reached by applying *qiyās* alone.⁶¹ The particular piece of textual evidence could be, for example, a hadith that would not have been taken into account when applying *qiyas* and which results in a different rule that is to be preferred. An example of the use of *istihsān* is the following case: A person eats while forgetting that he is supposed to be fasting. Qivās would dictate that his fasting has become void, for the crucial consideration in *qivas* is that food has entered his body. However, Qiyās is not applied due to a hadīth that declares fasting valid if eating was the result of a mistake. 62 The reason for the preference of *istihsān* and the abandonment of *qiyās* is not only determined by the Quran or sunna but also by the $ijm\bar{a}$ (consensus) of the legal scholar and the principle of darūra. Darūra (necessity) is a legal terminology used to describe a state of necessity that allows one to do something illegal or to refrain from doing something required by law.63 The principle of darūra has a similar

⁵⁹ Hallaq, History of Islamic Legal Theories, 117.

⁶⁰ Rabb, "Ijtihād".

⁶¹ Hallaq, History of Islamic Legal Theories, 108.

⁶² See also for further examples Hallaq, *History of Islamic Legal Theories*, 108.

⁶³ R. Paret, "Istiḥsān and Istiṣlāḥ," in Bearman et al., Encyclopaedia of Islam, Second Edition.

function and can be considered a legal source in specific cases.⁶⁴ Darūra is a principle of Islamic legal theory used to justify noncompliance with Islamic legal norms in the sense of 'predicaments make the forbidden permissible' (al-darurāt tabih al-mahdurāt).65

Although the Malikites, Shafiites, and Hanbalites reject istihsan as a method of deriving laws, they accept the instrument of istislah. Again, qivas, the usual method of law-finding, is excluded in favour of a more suitable method. In contrast to istihsan, istislah is more limited and more closely defined in content because it replaces the 'finding-better' of the former method by the principle of maslaha: considering the universal good, public interest, or human welfare in the broadest sense. A frequently quoted example of istislah is a case of war where enemies of Islam drive Muslim prisoners in front of them to protect themselves. The Muslims ought not to shoot at or kill their co-religionists. However, it is believed to be supported by the spirit of law that sacrificing a few Muslims is better than handing over the whole community to destruction.66

b 'Urf and 'āda

In classical Islamic law, neither 'urf (customary law) nor 'āda (custom) were sources of law. In practice, however, *ada* was frequently drawn on as a material source of law. In the 16th century, 'urf became a de facto source of law. *urf* is therefore accepted as long as it does not contradict the mandatory rules of the sharia. Some jurists even see '*urf* as a justification for abandoning *qiyās* when applying the method of istihsān.67

С Madhhab al-sahābī

Most Sunni jurists agree that the sahāba (the Prophet's companions) consensus decisions have normative character. However, there is a controversy about their opinions and practice, which in legal terms is called madhhab al-sahābī, ('the school of the Prophet's companions') and whether these are binding. Shafiites and some sections of the Hanbalites oppose considering their practice as a source of law due to their fallibility as human beings.68

64	Rohe, Islamic Law in Past and Present, 85.
65	Y. Linant de Bellefonds, "Darūra," in Bearman et al., <i>Encyclopaedia of Islam, Second Edition</i> .
66	Paret, "Istiḥsān and Istiṣlāḥ."
67	G. Libson and F. H. Stewart, "Urf," in Bearman et al., <i>Encyclopaedia of Islam, Second Edition</i> .
68	Rohe Islamic Lawin Past and Present 86

68 Rone, Islamic Law in Past and Present, 86.

d Sadd al-darā'ī

Sadd al-darā'ī ('blocking the means') prohibits access to everything that might lead to something prohibited. An example of this method is the legal restrictions in present-day Syria on polygamy: The Quran asks the husband to treat his wives equally. To prevent unequal treatment by the husband, Syria has enacted legislation restricting polygamy, applying the principle of *sadd al-darā'ī*.⁶⁹

e Istiṣḥāb and Sharʿman qablanā

Istiṣḥāb is the principle of continuance. It is presumed that a judicial situation that had previously existed continues unless it is proved that it has ceased to exist or has been modified. The Shafiites mainly apply this presumption of continuity.⁷⁰ This principle is closely related to the principle of *shar*[']man qablanā ('norms of those before us'), which refers to the Torah and the Bible. In cases where Islam's sources of law do not contain a definitive rule, traditional regulations from the sources of the other two monotheistic religions are applied.⁷¹

III. Islamic Law Before European Encounter

1. Prevalent Discursive Characterization

The literature on Islamic law describes the formative period of Islamic law as having ended by the 11th century. Schacht, the famous orientalist, describes Islamic jurisprudence to have been adaptable and growing until the early Abbasid period (750-1258 CE), and from then onwards to have become increasingly rigid and stable.⁷² A certain canonization of Islamic jurisprudence occurred in the centuries thereafter. This development has been described as having gone hand in hand with what the literature calls 'the closing door of *ij*-*tihād*' or 'the doctrine of *taqlīd*' (imitation). According to Schacht, Sunni jurists decided gradually after the formative period of Islamic jurisprudence that all the central questions of law had been thoroughly discussed and finally settled. This view influenced the practice of *ijtihād*; it became restricted in favour of practising *taqlīd* from the 11th century onward. In other words, independent juristic reasoning was increasingly excluded by the binding decisions of earlier

69	Rohe, Islamic Law in Past and Present, 91.
70	Y. Linant de Bellefonds, "Istiṣḥāb," in Bearman et al., <i>Encyclopaedia of Islam, Second Edition</i> .
71	Rohe, Islamic Law in Past and Present, 93.
72	Goldziher and Schacht, "Fikh."

legal scholars. All jurisprudential activity was confined to the explanation, application, and at the most, interpretation of the doctrine laid down by earlier jurists. Schacht has called this development 'the closing of the door of *ijtihād*' where from a point in time, the doctrines of established schools and authorities needed to be followed without questioning because no one remaining was deemed to have the necessary qualification for *ijtihād*.⁷³

Another common characterization of Islamic law after the formative period and before the encounter of the Islamic legal system with the European legal culture, nominated as classical Islamic law in the literature, is of a 'scripturalist' (or 'positivist') view, as typified by the orientalist scholars Anderson and Schacht. This view holds that Islamic law is a legal practice based entirely on the methodological and substantive doctrines of predominant jurists of the past and as recorded in their *fiqh* books.⁷⁴ This type of Islamic law has been described as being a 'jurist's law'⁷⁵ because it was created and developed by private legal specialists and evolved more or less independently of the state through a purely interpretative exercise.⁷⁶ According to the positivist view, legal science, and not the state, plays the part of a legislator, and scholarly handbooks have the force of law.⁷⁷ This view limits the state's role to the enforcement of the body of rules developed through *fiqh* by legal scholars.⁷⁸

2. Other Discursive Characterisation

The perception of Islamic law as jurists' law has been criticized for ignoring the fact that regulations were also issued by political, not religious, authorities, often in the areas of taxes and public finances, administration, and penal matters. In the Islamic legal tradition, this type of law is known as *siyāsa* (governance). *Siyāsa* was rooted in the raw power of the state and was justified solely on the jurisprudential doctrine of *darūra* (necessity). *Siyāsa* was enforced according to the *siyāsa* administrative authority of Islamic law, which gives the rulers the right to execute their discretionary powers in legislating outside

75 Schacht, Introduction to Islamic Law, 5.

⁷³ Joseph Schacht, *An Introduction to Islamic Law* (New York: Oxford University Press, 1964), 70-71.

⁷⁴ Leonard Wood, "Legislation as an Instrument of Islamic Law," in Emon; Ahmed, *The Oxford Handbook of Islamic Law*, 569.

⁷⁶ Hallaq, Origins and Evolution, 204; Benjamin Jokisch, "Origins of and Influences on Islamic Law," in Emon; Ahmed, The Oxford Handbook of Islamic Law.

⁷⁷ Schacht, Introduction to Islamic Law, 5.

⁷⁸ See Mohammad H. Fadel, "Islam, Constitutionalism and Democratic Self-Government," in Abou El Fadl; Ahmad; Hassan, Routledge Handbook of Islamic Law, 419.

the sharia framework.⁷⁹ *Siyāsa* regulations did not replace sharia rules; they supplemented them where the sharia was silent or imprecise. This legislation was always regarded as part of the Islamic legal order and as complying with sharia.⁸⁰ Later scholars attempted to subject *siyāsa* to the normative discipline of the sharia, giving rise to what they called *siyāsa sharʿīyya*, which means governance according to sharia.⁸¹

These legislative activities constituted the basis of Ottoman $q\bar{a}nun$ legislation. From the 15th century on, the Ottoman rulers enacted regulations dealing with land, fiscal, and criminal law, which became to be known as $q\bar{a}nun$ law. These Ottoman state legislation helped pave the way for the codification movement of the 19th century, which began with the Ottoman commercial code of 1850 and the Civil Code, the so-called *Mecelle*, which was developed between 1869 and 1876.⁸² The Ottoman $q\bar{a}nun-n\bar{a}m\bar{a}$, which is a compilation of $q\bar{a}nun$, can be defined as a legal code that contained state directives on criminal penalties, urban and rural taxation, land use, market organization, manufacturing and artisanal production, and military matters.⁸³ $Q\bar{a}nun$ has been defined as a 'law of human origin'⁸⁴ or as the law of the empire, in contrast to sharia as the law of the religious community.⁸⁵

The theory that Islamic law comprised only jurists' law and the theory of 'the closing of the door of *ijtihād*' have been further criticized for perpetuating certain assumptions about Islamic law. The assumptions are that Islamic law, as divine law, is essentially an unchanging system that has limited ability to adjust to new circumstances. It is suggested that legal concepts developed by the 11th century remained unchanged in the 19th century. Islamic law's religious character is seen to have produced its rigidity, which in turn made it impractical for the governance of a dynamic society, thus producing a gap between theory and practice. Thus, Islamic law is seen to provide little guidance or easily implemented prescriptions on many aspects of government. Its substantive

⁷⁹ Hilmar Krüger, "An Introduction to the Law of Contract in Arab States," Studi Maghrebini 2004, 201-222: 202; Y. Linant de Bellefonds et al., "Kānūn," in Bearman et al., Encyclopaedia of Islam, Second Edition; Rohe, Islamic Law in Past and Present, 239, 525. Boğaç A. Ergene, "Qanun and Sharia," in Bearman; Peters, The Ashgate Research Com-80 panion to Islamic Law, 109. Fadel, "Islam, Constitutionalism and Democratic Self-Government," 419. 81 Krüger, "An Introduction," 202. 82 Ergene, "Qanun and Sharia," 109. 83 84 Uriel Heyd, "Kānūn and Sharī'a in Old Ottoman Criminal Justice," Proceedings of the Israel Academy of Sciences and Humanities 3, no. 1 (1967): 9-10. 85 Colin Imber, Ebu's-Su'ud: The Islamic Legal Tradition (Edinburgh: Edinburgh University

⁸⁵ Colin Imber, Ebu's-Su'ud: The Islamic Legal Tradition (Edinburgh: Edinburgh University Press, 1997), 40-42.

law is given the attribute of deficiency. Given these supposed inadequacies of religious law, the prevalent scholarship suggests that Islamic rulers had to adopt a separate, nonreligious system of law to govern their territories effectively.⁸⁶ Thus, *siyāsa* or *qānun* legislation is characterized as a product of the chasm between the theoretical ideal set out in the jurists' law and the lived realities of Muslim societies.⁸⁷

IV. Islamic Law Today

1. Prevalent Discursive Characterization

The development of the contemporary Islamic legal system has been shaped by the encounter with European legal culture, the major rupture being the emergence of the state as a central legislator.88 Muslim societies underwent radical changes from the 17th century onward when they began to experience more extensive contact and confrontation with European culture. Some parts of the Islamic world became subjugated under direct or indirect colonial rule, such as India under British rule and Indonesia under Dutch rule. Other parts, such as Egypt, sought contact with Europe on their own accord. The contact led primarily to the introduction of the European nation-state because the colonizer's new economic interests required stringent political control for colonial administration. The nation-state as a model for legal relations between the colonizing country and the new states and between the rulers and their subjects constituted a radical rupture with the pre-existing state system. It implied a new conceptualization and practice of normativity. No modern state was deemed possible without law, nor was the imposition of modern law, a law that would bring justice, progress, and prosperity, possible without a modern state.89

The modernization process meant creating a system of state law modelled on the national law of the colonizing country. Not only was the legal substance overhauled but also the various segments of a legal system: the parallel court system of religious and non-religious courts had to be unified in a single system of national courts, the parallel regulations had to be unified in a single system of national law, the new legal system had to be codified, and a new

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87	Bernar 1988), 3		wis,	The	Polit	ical I	angua	ge of Isla	am (Ch	icag	o: Univers	sity of C	hicago	Press,	
86	E.g. Scł	ıach	t, In	trod	uctio	onto	Islamic	Law, 77	; Couls	son,	History of	^F Islamic	:Law,	5,27.	

⁸⁸ Guy Burak, "Codification, Legal Borrowing and the Localization of 'Islamic Law'," in Abou El Fadl; Ahmad; Hassan, *Routledge Handbook of Islamic Law*, 392.

⁸⁹ Léon Buskens, "Sharia and the Colonial State," in Bearman; Peters, *The Ashgate Research Companion to Islamic Law*, 210.

profession of legal practitioners with knowledge of this new legal system had to be developed.⁹⁰ These reforms followed the idea of a state that is based on the then-novel concept of trias politica, or division of powers, whereby laws are promulgated by the legislature, executed by the government and used as the sole basis for adjudication by the courts.⁹¹ One of the consequences was that God was no longer the legitimizing source of laws. Consequently, there was no longer room for religious-legal sanctioning because the only legitimate sanctions were to be imposed by the state.92 Furthermore, the right to interpret Islamic law was transferred to the legislature. Before, the monopoly of interpretation of the sharia was with religious scholars. Even the judges and rulers would consult a religious scholar when confronted with a question that required the sharia viewpoint. The opinions of these scholars were often issued in writing as a fatwa and would become part of the court ruling. These opinions were no longer needed in the new nation-state system because the judiciary no longer relied on the expertise of religious legal scholars but on codified rules and a state court system.93

The area not replaced by European law concerned all issues of personal status following Savigny's pattern, developed in his work *System des heutigen römischen Rechts* (1867). His pattern of an inherent dichotomy between family and contract law played a significant role in the policies of all the 19th century colonizing states. When organizing the legal system and the laws in their new colonies, Savigny's pattern was applied, thus creating a distinction between the area in which local law would be more or less respected, family law, and that in which it would be replaced by the supposedly universal rational law of contract and property of European origin.⁹⁴

The result of this process is the Islamic legal system that exists to this day. In scholarship, the substance of Islamic law today has been described as divided into laws of Islamic origin and of European origin. The former is described as having been reduced to family and inheritance law, whereas commercial,

91 Berger, "Sharia and Nation State," 224.

⁹⁰ Rudolph Peters, "From Jurists' Law to Statute Law or What Happens When the Shari'a Is Codified," *Mediterranean Politics* 7, no. 3 (2002): 88-89; Maurits S. Berger, "Sharia and the Nation State," in Bearman; Peters, *The Ashgate Research Companion to Islamic Law*, 223.

⁹² Aharon Layish, "Islamic Law in the Modern World," *Islamic Law and Society* 21, no. 3 (2014): 280.

⁹³ Berger, "Sharia and Nation State," 225.

⁹⁴ Duncan Kennedy, "Savigny's Family/Patrimony Distinction and Its Place in the Global Genealogy of Classical Legal Thought," *The American Journal of Comparative Law* 4, no. 58 (2010): 813.

administrative, maritime, and criminal laws were replaced or heavily influenced by European codifications by the end of the 19th century.⁹⁵

2. Other Discursive Characterisation

2.1 Islamic Law's Continued Existence

What Islamic law today is, and what role it should play in contemporary states, is much contested in scholarship.⁹⁶ A minority view is that Islamic law no longer exists today because the normativity of *fiqh* has been replaced by the new state order, in which the state is the only legitimate authority to promulgate laws. Moreover, from the perspective of classical Islamic law, the state is constitutionally disabled from legislating positive law.⁹⁷

Other scholars also acknowledge that the legal formulations of classical sharia are no longer the sovereign law of most states of the Muslim world. However, they reason that Islamic law still exists as a product of modernity and a modern concept. For example, in Sardar Ali's view, Islamic law is a dynamic, fluid, and evolving normative framework that generates and is generated by social, political, cultural, and economic factors. She states that sharia principles are inherently dynamic: sensitive and susceptible to the changing needs of societies. Thus, in her view, the laws that are legislated by the state are not 'un-Islamic' because sharia has afforded states the right to legislate for their populations for centuries using laws inspired by sharia and determined through human deliberation based on the doctrine of *siyāsa*, which gives the rulers the right to execute their discretionary powers in legislating outside the sharia framework.⁹⁸

Dupret and Buskens are also of the opinion that Islamic law exists today but in an 'invented' form.⁹⁹ As Dupret puts it: 'The idea of transforming Islamic rules into law and, particularly, codified law is the result of an invention rooted in European intervention on the Muslim scene'.¹⁰⁰ Buskens explains that when

95	Krüger, "An Introduction," 202; Y. Linant de Bellefonds, Cl. Cahen, and H. İnalcık, "Ķānūn," in Bearman et al., <i>Encyclopaedia of Islam, Second Edition</i> ; Rohe, <i>Islamic Law</i> <i>in Past and Present</i> , 239, 525.
96	Shaheen Sardar Ali, <i>Modern Challenges to Islamic Law</i> (Cambridge: Cambridge University Press, 2016), 1.
97	Wael B. Hallaq, <i>The Impossible State: Islam, Politics, and Modernity's Moral Predicament</i> (New York: Columbia University Press, 2013); Fadel, "Islam, Constitutionalism and Democratic Self-Government," 419.
98	Ali, Modern Challenges to Islamic Law, 39, 40.
99	Buskens, "Sharia and Colonial State," 212; Baudouin Dupret, <i>What Is the Sharia?</i> (Oxford: Hurst. 2018), 133.

100 Dupret, What Is the Sharia?, 133.

Europeans viewed the norms existing in Muslim societies through the lens of their own legal tradition, they equated sharia normativity with law. This European approach to normativity made clarity, uniformity, and predictability of norms necessary. At the same time, this could not be found in the Islamic legal system, which allowed for ambiguity, legal pluriformity, and flexibility in judicial practice. What resulted was an equation of sharia normativity with 'Islamic law', an authoritative and unequivocally formulated set of binding rules to be imposed by the state in the form of a code-like set of do's and don'ts.¹⁰¹ The idea of the sharia being 'Islamic law' in a positivist sense of the word has in the meantime become embraced by Muslim natives because of the pervasive influence of colonial powers over Muslim cultures.¹⁰²

2.2 Personal Status Laws Influenced by Many Different Sources

While some scholars debate whether Islamic law exists today, others have criticized the view that personal status laws in Middle Eastern states can be categorized as 'Islamic law'. Close observation of personal status laws today, which in most Middle Eastern states are codified as state-issued law, shows that these regulations cannot be traced back exclusively to classical legal sources but are fed from several clusters of sources and influencing factors, which may well lead to widely differing results and provisions.¹⁰³ The field of family law is often observed to have undergone structural and foundational changes that severed its ties to the substance of classical figh law and the methodology by which figh operated. Principles and methods of Islamic jurisprudence were applied differently than in Islamic legal tradition once this field was first codified into stateissued law. This process has been called neo-ijtihād, an interpretative approach that relates to classical *ijtihād* but operates largely independently from *figh* hermeneutics. Some methods were given wider or narrower scope than foreseen in traditional figh in the modernization process of the law to justify a utilitarian approach to the promulgation of the law.¹⁰⁴

101	Buskens, "Sharia and Colonial State," 212.
102	Dupret, <i>What Is the Sharia</i> ?, 141; Khaled Abou El Fadl, "What Type of Law Is Islamic Law?," in Abou El Fadl; Ahmad; Hassan, <i>Routledge Handbook of Islamic Law</i> , 11.
	Law?, III Abou El Faul, Allilau, Hassall, Koulleuge Hullabook of Islamic Law, 11.
103	${\tt Hans-Georg Ebert, Is lamisches Familien- Und Erbrecht Der Arabischen L\"ander: Heraus-$
	forderungen Und Reformen (Berlin: Frank & Timme, 2020), 163.
104	Wael B. Hallaq, "Islamic Law: History and Transformation," in <i>Islamic Cultures and Soci-</i>
	eties to the End of the Eighteenth Century, ed. Robert Irwin, The New Cambridge History
	of Islam 4 (Cambridge: Cambridge University Press, 2011), 182-183.

2.3 Re-Islamization of Laws

Another critique of the prevalent characterization Islamic legal system today can be found in the phenomenon of re-Islamization, a process in which Muslim governments have taken legislative initiatives to reinstate 'sharia'.¹⁰⁵ Re-Islamization has been demanded in Muslim countries by various revivalist movements, which reject the accommodationist spirit of Islamic modernism. These Islamic revivalist movements, Islamism and Salafiyya among them, emerged with the aim of recovering the authentic message of the original Muslim community to produce Islamic responses to the new demands of modernity and to escape colonialism and the perceived decline of the Islamic world in scientific achievements and intellectual endeavour. Although these movements look back in time, they are not to be understood as rejecting modernity.¹⁰⁶ Indeed, their emergence is an expression of modernity. Islamists call for a return to sharia and a renewed commitment to Islam as the basis of communal solidarity, social justice, and the fair treatment of the poor. Especially when these movements first emerged as a political force, they propagated the removal of corrupt regimes to establish Islamic states and enforce Islamic morality in Muslim-majority societies.107

According to the literature, the demand for re-Islamization of laws in Muslim states has been implemented mainly by setting Islamic or sharia law as a constitutional standard and by reforming laws in the areas that were once regulated by *fiqh*. ¹⁰⁸ Many Muslim states have attempted to implement 'constitutional Islamization'¹⁰⁹ by the insertion of either an 'Islamic supremacy' clause that declares sharia to be a or the principle source of legislation or a repugnancy clause stating that no legislation may be adopted that contradicts the sharia. In Egypt, for example, article 2 of the 1971 Constitution was introduced, which declared that 'the principles of sharia shall be *a* [*the*, according to the 1980 Con-

28, no. 3 (2013).

^{Richard Debs,} *Islamic Law and Civil Code: The Law of Property in Egypt* (New York: Columbia University Press, 2010), 56-57.
See Abdullah Saeed, "Salafiya, Modernism, and Revival," in *Oxford Handbook of Islam and Politics*, ed. John L. Esposito and Emad E. Shahin (Oxford: Oxford University Press, 2013).
Lapidus, "Islamic Revival and Modernity," 444-445.
Martin Lau, "The Re-Islamization of Legal Systems," in Bearman; Peters, *The Ashgate Research Companion to Islamic Law*, 235; Clark B. Lombardi, "Constitutional Provisions Making Sharia 'a' or 'the' Chief Source of Legislation: Where Did They Come from? What Do They Mean? Do They Matter?," *American University International Law Review*

¹⁰⁹ Ali, Modern Challenges to Islamic Law, 63.

stitution] chief source of legislation'.¹¹⁰ The aim of this article is to ensure that substantive law is compatible with the sharia. This stipulation also allows the judicial review of laws by courts based on sharia. Other examples are: the Syrian constitution, which demands legislation to comply with *fiqh*, the Iranian constitution requiring that all legislation be based on 'Islamic criteria', and the Pakistani constitution, which refers to the 'Quran and sunna'.¹¹¹ As in Egypt, the various terms in which compliance with sharia is required are not defined either as to the scope of law they encompass or as to the interpretation or school of law that is applicable; the breadth of Islamic legal scholarship allows for many interpretations.¹¹²

Scholars have pointed out that because the Supreme Courts are restrictive in their interpretation of the various constitutional sharia supremacy clauses, the changes of the law have been only 'cosmetic', meaning that re-Islamization through sharia compatibility clauses has had no impact on reshaping the laws and legal systems.¹¹³ The reason is found in the legal systems of Muslim-majority states today. Islamization of the laws has been attempted within the framework of non-Islamic legislative and judicial systems. The Islamic nature of the legal system's structure was never questioned, and all attention was focused on its content, the law. Re-Islamization is therefore often seen as a concession to Islamist forces to take the wind out of their sails: in countries such as Iran. Sudan, and Pakistan, sharia law codes have been enacted in many fields.114 According to Peters, it is striking that even in those Islamist regimes that re-Islamized their legal systems, sharia is not implemented from figh-books but via modern Western legal forms; legislation and the power to legislate still rest in the hands of parliament and government.¹¹⁵ In the wake of re-Islamization, even conservative Islamic activists only called for sharia law without wanting to abrogate the legislative, judiciary, or parliamentary state system.¹¹⁶

- 111 Lombardi, "Constitutional Provisions," 744, 747, 751.
- 112 Berger, "Sharia and Nation State," 226.
- 113 Peters, "From Jurists' Law to Statute Law," 91; Clark B. Lombardi, *State Law as Islamic Law in Modern Egypt: The Incorporation of the Shari'a into Egyptian Constitutional Law* (Leiden: Brill, 2006), 129, 135; Lombardi, "Constitutional Provisions," 770.
- 114 Berger, "Sharia and Nation State," 226.
- 115 Only in Saudi Arabia is sharia applied completely without codification. State legislation can be enacted in case sharia is silent or equivocal in a particular area. This means that nearly everywhere the state has the power to determine what sharia norms are, Peters, "From Jurists' Law to Statute Law," 92.
- 116 Berger, "Sharia and Nation State," 228.

¹¹⁰ Maurits S. Berger and Nadia Sonneveld, "Sharia and National Law in Egypt," in Sharia Incorporated: A Comparative Overview of the Legal Systems of Twelve Muslim Countries in Past and Present, ed. Jan M. Otto (Leiden: Leiden University Press, 2010), 52, 64, 70, 73, 84-85.

The only field that has been substantially affected by re-Islamization is the field of criminal law because it is an area of the law that is covered in detail by high-ranking legal sources, the Quran and the *sunna*.¹¹⁷ The re-introduction of Is-lamic criminal law did not happen across the whole legal system but as the implementation of several specific crimes and their punishments, called *hudūd* crimes, without the classical rules of procedure or evidence. These rules set many obstacles to the enforcement of these crimes and prescribe capital or corporal punishments, such as the requirement of four eyewitnesses to actual penetration in the case of unlawful sexual intercourse. States that introduced Islamic criminal law added this confined set of rules to the existing secular criminal code.¹¹⁸ Therefore, the literature has called this area of re-Islamized law hybrid law.¹¹⁹

The notion of re-Islamization is interpreted as a shift in the general understanding of sharia's role in the state.¹²⁰ In Berger's view, sharia is used today as a source of public morality. Although introducing sharia compatibility clauses has proved ineffective in reshaping the legal system, in almost all Muslimmajority states today, sharia or 'the rules of religion' are still upheld as the formal motivation for the law of the land. Much of the contemporary appeal of sharia for Muslims is its centrality to their Muslim identity. By recourse to sharia law, however formal, the belief endures that religion governs the character of the modern-day state.121 Islamists who view contemporary Muslim societies as denying their proper Muslim identity by the loss of sharia law, thus disregarding the fact that law is the product of the society whose law it is, and call for its re-establishment generally lack an understanding of the interpretive role that figh played in producing the legal system and of the innately pluralistic and noncodified nature of sharia. Sharia has been and is still a cultural phenomenon. It is necessarily viewed through sociocultural norms. It incorporates values and practices alien to the prescriptions of sharia when Muslims today view it in the light of their cultural background. Practices such as enforcing a strict dress code for women and upholding a family's honour by retribution are erroneously believed to conform with sharia.122 In terms of substantive law, Berger finds that sharia is not unlike much of the secular law that is or has been in place in many Muslim-majority states. Many of the laws

¹¹⁷ Rohe, Islamic Law in Past and Present, 526.

¹¹⁸ Peters, "From Jurists' Law to Statute Law," 91-92; Berger, "Sharia and Nation State," 226

¹¹⁹ Wood, "Legislation as an Instrument of Islamic Law," 565.

¹²⁰ Lombardi, "Constitutional Provisions," 740.

¹²¹ Berger, "Sharia and Nation State," 231-232.

¹²² Rudolph Peters and Peri Bearman, "Introduction: The Nature of the Sharia," in Bearman; Peters, *The Ashgate Research Companion to Islamic Law*, 9.

are 'rubberstamped' as compatible with sharia because they are not considered to be in violation of sharia. Given that the formal legal system is not challenged on Islamic grounds either, he raises the question of what precisely the difference is between a secular and an Islamic legal system.¹²³

V. Conclusion

Scholarship on Islamic law revolves closely around the Islamic character of laws in the states of the Islamic world to make a statement on Islamic law and the legal systems of Muslim-majority states today. Even scholarship that criticizes the focus on Islamic legal elements as the characterizing factor of contemporary legal systems and urges abandonment of the dichotomous view of a division between Islamic and non-Islamic legal elements does not detach itself from this prevalent characterization.

The assessment of the literature has shown that the researchers have only used classical Islamic law or state laws influenced by classical Islamic law to arrive at conclusions about the legal systems of Muslim-majority states today. What is lacking from scholarship on Islamic law is any treatment of novel legal fields such as medicine, arbitration, banking, copyright, environment, social security, and taxation. The reason for this might lie in the assumption that this category of law is not an object of interest for research on Islamic law since they have no connection to Islamic law. Due to the absence of such topics from classical legal sources, it is assumed that the parliament and government issue the legislation in this category as state laws without connection with Islamic law. These assumptions go against the common consensus in scholarship that sharia, however defined, is an essential point of reference in the legal debate in Muslim states because sharia is binding for individuals and societies seeking to live by Islamic principles.¹²⁴

The next chapter provides an overview of organ transplantation as a medical procedure and presents ethical and legal assessments by international organizations and Islamic legal jurists.

123 Berger, "Sharia and Nation State," 231-232.

¹²⁴ See also Nathan J. Brown and Mara Revkin, "Islamic Law and Constitutions," in Emon; Ahmed, *The Oxford Handbook of Islamic Law*, 801.

Organ Transplantation

I. Introduction

Organ transplantation has progressed rapidly in recent decades. Transplantation surgery for some organs has developed into a well-established branch of surgery. The number of transplants has increased continuously worldwide, and success rates have increased substantially. The acceptance of brain death, the intensive research on immunosuppressive therapy and organ preservation, and the advances in surgical techniques have all contributed to the high demand for transplantable human organs.

Various cells, tissue parts, organs, and whole organ systems can be transplanted today. In many cases, the question is not one of technical feasibility but of sensitive and successful forms of long term-therapy, of ethical justifiability, and of the availability of organs or tissues. Indications for transplantation can arise from vital indications; the patient's survival can no longer be ensured without transplantation, such as heart or liver transplantation. Other transplantation procedures, such as kidney and pancreas transplants, aim to improve quality of life and prevent long-term disease-related complications. A further set of transplantation procedures, which are not treated in this research, are performed because they provide improvements from functional or cosmetic perspectives, such as transplantation of the hands or parts of the face, or for medically assisted reproductive procedures, such as uterus transplantation.¹²⁵

Organ failure can be caused by lifestyle-related, genetic, and idiopathic factors. Other causes of organ failure are associated with the public health issues challenging modern societies, such as obesity, diabetes, and malnutrition. For instance, a higher incidence of obesity leads to adult diabetes and causes kidney failure, and a rising incidence of obesity also leads to irreversible cardiovascular problems whose sole treatment is a heart transplant.¹²⁶

Due to medical progress and the rise of public health issues, organ demand is high. Additionally, the disparity between the supply and demand of human organs has been exacerbated by the COVID-19 pandemic, the impact of which has resulted in an 18% decline in the number of global transplants. According to the Global Observatory on Donation and Transplantation, less than 120,000 kidney transplants are performed worldwide each year, compared with more

126 See Beckmann, Kirste and Schreiber, Organtransplantation, 23.

¹²⁵ See Jan P. Beckmann, Günter Kirste and Hans-Ludwig Schreiber, *Organtransplantation: Medizinische, rechtliche und ethische Aspekte,* 2nd ed. (Freiburg i. Br.: Alber, 2012), 23.

than 5 million patients undergoing dialysis annually.¹²⁷ Chronic kidney disease has a global prevalence of 9.1% and is estimated to cause 1.2 million deaths and result in 35.8 million disability-adjusted life years annually.¹²⁸

Huge gaps exist in donation rates and practices among countries, indicating differences in organizational approaches and levels of resources dedicated to detecting and managing donors and procuring donated organs. Countries with a lower human development index generally do not have active kidney or liver transplant programmes. Even in some state where such programmes exist, governmental support is not robust. Often, programmes are offered only by private for-profit institutions and depend on living donors. Countries with a lower human development index also rely more on living donation and do not have functioning deceased donor programmes.¹²⁹ The shortage of donors, combined with the low availability of transplantation services in many states, leads to transplantation tourism and incentivizes people to obtain a transplant through illegal and unethical paths, usually from poor and vulnerable populations from whom organs are harvested.¹³⁰ For these reasons, the World Health Organization (WHO) has called for access to transplantation to be improved. Lower-income countries should provide prerequisite transplant facilities, waiting lists, workforce, political will, and publicly funded health care systems to facilitate increased access to transplantation, especially from deceased donors. High-income countries are called on to overcome system-specific challenges of low public awareness and education to raise donation numbers.131

II. Organ Transplantation as a Medical Procedure

1. A Short History of Organ Transplantation

The history of organ transplantation is very recent. At the beginning of the 20th century, experiments in transplantation were first conducted on animals. Following these efforts, attempts were made to transplant kidneys from animals to humans, called xenotransplantation. The first human-to-human organ transplant in history was performed with a kidney from a cadaver in Russia in

^{Global Observatory on Donation and Transplantation, "International Report on Organ} Donation and Transplantation Activities: Executive Summary 2019".
GBD Chronic Kidney Disease Collaboration, "Global, Regional, and National Burden of Chronic Kidney Disease, 1990-2017: A Systematic Analysis for the Global Burden of Disease Study 2017," *The Lancet* 395, no. 10225 (2020): 722.
WHO, "Seventy-Fifth World Health Assembly, Human Organ and Tissue Transplantation, Report by the Director-General, WHA75/41 (12 April 2022)," n 23.
WHO, "WHA75/41," n 25.

¹³¹ WHO, "WHA75/41," n 26.

1936. The first living donor kidney transplant was performed in France in 1952. Neither procedure was unsuccessful. In 1954, the first successful living donor kidney transplant was performed between genetically identical twins. However, the long-term success of transplants from dizygotic or unrelated donors remained unattainable due to genetic mismatch and high incidence of organ rejection.¹³²

In the 1960s, azathioprine was approved and used as the primary immunosuppressive agent to prevent organ rejection. The development of azathioprine was a breakthrough in successful kidney transplantation. In 1962, the first successful renal transplant was performed between unrelated patients. However, the drug did not provide adequate immunosuppression for the transplantation of other solid organs such as the heart, liver, and lung, or it became toxic, resulting in severe kidney damage. Despite its limits, the first pancreas, liver and heart transplants were performed between 1966 and 1967. In the early 1970s, an effective immunosuppressive drug was developed called cyclosporin A (CsA). CsA inhibits the rejection response without damaging other functions of the immune system. The routine use of CsA was initiated in 1983. The discovery of immunosuppressive drugs enabled transplants without using blood-related donors and significantly increased the number of transplants and survival rates from biologically unrelated donors.¹³³

Until the 1960s, cadaveric organs were retrieved from patients who had died of cardiac death (a 'non-heart-beating donor'), the only recognized type of death at the time. In 1959, the idea was introduced of *coma dépassé*, a state beyond the deepest type of coma.¹³⁴ *Coma dépassé* was made possible by artificial ventilation, which preserved oxygenation to organs in patients with no brain function who would have otherwise expired due to respiratory arrest. In 1963, the first organ transplantation from a 'beating-heart donor', equivalent to what is today called a 'brain-dead donor', was successfully performed.¹³⁵ After the introduction of the notion of brain death, neurologists began to postulate that neurological function was equal to or more vital than cardiopulmonary function and began a process of defining death neurologically, independent of

¹³² See Blanche Chavers, "The History of Pediatric Solid Organ Transplantation," in Hakim; Papalois, *History of Organ and Cell Transplantation*, 227ff.

¹³³ See Melissa Kamps, "The History of Immunosuppressive Drugs," in Hakim; Papalois, *History of Organ and Cell Transplantation*, 337ff.

¹³⁴ See Pierre Mollaret and Maurice Goulon, "Coma Dépassé," *Revue Neurologique* 1959, no. 1 (101).

¹³⁵ Kristen D. Nordham and Scott Ninokawa, "The History of Organ Transplantation," *Proceedings (Baylor University Medical Center)* 2022, no. 1 (35): 126.

other essential organ functions. In 1968, the Harvard faculty proposed the first clinical definition as the Harvard Brain Death Criteria, which consisted of clinical and electroencephalography (EEG) criteria.¹³⁶ In 1980, the Uniform Determination of Death Act established a legal basis for a neurological determination of death in the USA, and guidelines were put forth in the 1995 (and revised 2010) American Academy of Neurology guidelines on the determination of brain death/death by neurological criteria (BD/DNC).¹³⁷ An international forum in 2012 organized in partnership with the WHO agreed that BD/DNC is equivalent to death and advocated that all death, including death after cardiac arrest, should be considered as neurological.¹³⁸ Meanwhile, BD/DNC has been accepted by the majority of states around the world.¹³⁹

2. Death Criteria

2.1 Brain Death

The brain is the superordinate organ for all thought processes, processing and controlling sensory impressions. All conscious and unconscious actions and functions are controlled in the brain. In addition, reflexes are controlled in the brain. If the brain fails, perception of sensory impressions is impossible, and functions essential for the organism's existence cannot be controlled. Vital functions such as breathing, circulatory control, and body temperature are lost. When these functions of the brain are extinguished, the person is considered dead. Causes for the onset of brain death are severe brain damage, for example due to injuries, haemorrhages, strokes, cardiac arrest, or a significantly reduced supply of oxygen.¹⁴⁰

The success of organ transplantation was not possible until the concept of brain death was defined. The concept of brain death, also commonly referred to as death by neurologic criteria (BD/DNC), is based on scientific principles. The irreversibility of brain death has been confirmed in decades of medical

¹³⁶ Ad Hoc Committee of the Harvard Medical School, "A Definition of Irreversible Coma: Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death," *JAMA* 205, no. 6 (1968).

¹³⁷ William Spears, Asim Mian, and David Greer, "Brain Death: A Clinical Overview," Journal of Intensive Care 10, no. 1 (2022): 1.

¹³⁸ Sam D. Shemie et al., "International Guideline Development for the Determination of Death," *Intensive Care Medicine* 40, no. 6 (2014): 795.

¹³⁹ Ariane Lewis et al., "Determination of Death by Neurologic Criteria Around the World," *Neurology* 95, no. 3 (2020): e301.

¹⁴⁰ Kenia A. Maldonado and Khalid Alsayouri, "Physiology, Brain," in StatPearls, ed. Kenia A. Maldonado and Khalid Alsayouri (Treasure Island: StatPearls Publishing, 2023).

practice. Brain death is medically and socially accepted today.¹⁴¹ Brain death is defined as the permanent, irreversible, and complete loss of brain function.¹⁴²

There are several concepts of BD/DNC. The most widely accepted is the 'whole brain' formulation, which asserts that brain death is equivalent to catastrophic injury to all the major structures of the brain, including the hemispheres, diencephalon, brainstem, and cerebellum.143 In this view, confirmation of complete and permanent damage to the whole brain should be confirmed before BD/DNC is ultimately declared. This concept is the foundation of the original Harvard brain death criteria and is the formulation officially advocated by the United States and most other countries for which official national brain death protocols exist. The other widespread concept refers to 'brainstem death' which is the accepted construct in the United Kingdom and a few other countries.¹⁴⁴ This concept asserts that destruction of the brainstem alone is equivalent to the death of a human, given that the brainstem partially houses the centres for consciousness as well as essential cardiac and respiratory centres. From this line of thinking, it follows logically that damage to other brain areas has no relevance to diagnosing BD/DNC in severe primary infratentorial brain injury. Clinically, the distinction between the 'whole brain' and 'brainstem' formulations of death is of little consequence. In most devastating brain injuries by any mechanism, irreversible injury to the brainstem occurs. Therefore, an injury to the whole brain is likely in most cases.145

2.2 Death after Permanent Cardiac Arrest

There is another pathway for organ donation from deceased persons in addition to donation after brain death (DBD): donation after circulatory death (DCD). Most transplants worldwide are gained from DBD donors. In some countries, clinics also transplant organs from DCD donors due to a shortage of donor organs along with and thanks to technical developments leading to improved post-transplant outcomes.¹⁴⁶

In cases of permanent cardiac arrest, death is defined as the irreversible cessation of the brain's functions, including the brainstem. Death occurs as a result of the cessation of cerebral circulation. First, cardiac arrest for DCD is

141	Spears, Miai	1 and Greer.	"Brain	Death." 12.

- 142 Spears, Mian and Greer, "Brain Death," 2.
- 143 Spears, Mian and Greer, "Brain Death," 2.

¹⁴⁴ See Lewis et al., "Determination of Death by Neurologic Criteria," e299ff.

¹⁴⁵ Spears, Mian and Greer, "Brain Death," 2.

¹⁴⁶ Andreas Elmer et al., "Organ Donation After Circulatory Death as Compared with Organ Donation After Brain Death in Switzerland: An Observational Study," *Swiss Medical Weekly* 152, w30132 (2022): 1.

diagnosed through a echocardiography. After a stand-off period without resuscitation measures defined as at least 5 to 10 minutes, depending on the jurisdiction, brain death must be determined by six neurological criteria; these are similar to the criteria to determine death due to primary brain damage.¹⁴⁷

DCD usually refers to patients with a devastating brain injury in whom further treatment has been deemed futile and for whom a decision has been made in favour of withdrawal of life-sustaining therapy (WLST). In such patients, brain death is not likely to occur within a short period; death occurs following a planned, expected cardiac arrest after WLST. These patients mostly have an end-stage neurodegenerative or cardiac or respiratory disease.¹⁴⁸ After a permanent cardiac arrest has occurred and death has been determined according to the medical criteria and protocol, the organs undergo rapid cold preservation, which is the flushing of the organs with a special solution cooled to about 15°C. These measures are continued until the positive or negative decision on organ donation is available subject to a time limit for the implementation of the preparatory measures, which is often set at 72 hours.¹⁴⁹

2.3 Critique of Brain Death Concept

Brain death is a controversial issue. Detractors of the concept of BD/DNC have argued several points, claiming that brain death is a legal construct with the sole purpose of permitting organ donation¹⁵⁰ or that some individuals who have been declared brain dead can continue to grow and function in ways that are arguably inconsistent with death.¹⁵¹ Some also argue that brain death cannot be declared when there is evidence of persistent neurological functioning, such as small areas of the brain that appear undamaged or persistence of neuroendocrine functioning following devastating cerebral injury.¹⁵²

Other critical voices acknowledge that BD/DNC concept is based on scientific principles and that the irreversibility of brain death has been confirmed by decades of medical practice. However, they argue that death can hardly be defined solely from a medical point of view and that the brain death concept is, first and foremost, a medical death criterion.¹⁵³ Conversely, a definition can-

147	Elmer et al., "Organ Donation After Circulatory Death," 1-2.
148	Elmer et al., "Organ Donation After Circulatory Death," 3.
149	Thomas Holznienkemper, Organspende und Transplantation und ihre Rezension in der Ethik der abrahamitischen Religionen (Münster: LIT, 2005), 60.
150	See, e.g., Seema K. Shah, Robert D. Truog, and Franklin G. Miller, "Death and Legal Fictions," <i>Journal of Medical Ethics</i> 37, no. 12 (2011): 719ff.
151	D. A. Shewmon, "Chronic "Brain Death": Meta-Analysis and Conceptual Consequenc- es," <i>Neurology</i> 51, no. 6 (1998): 1538ff.
152	Spears, Mian and Greer, "Brain Death," 2.

153 Holznienkemper, Organspende und Transplantation, 45.

not be right or wrong, only adequate or inappropriate, meaningful, or pointless. A definition always remains subject to ideological points of view and thus to a convention. Even if the criterion for brain death is scientifically valid and widely accepted, brain death as a criterion does not explain what human death is. These authors note that the concept of death is subject to diverse cultural-historical conceptions, and even today, this concept is interpreted quite differently from legal, philosophical, cultural and religious points of view in various contexts.¹⁵⁴

3. Commonly Transplanted Organs

3.1 Kidney

The kidneys' primary function is to remove waste substances and excess fluid through the urine. They regulate the body's salt, potassium, and acid content. The kidneys also produce hormones that affect the function of other organs, such as the production of red blood cells. The kidneys produce other hormones that help regulate blood pressure and control calcium metabolism. Kidney diseases can be caused by long-term diabetes and by congenital diseases. Infections ascending in the urinary tract can also damage the kidneys. Secondary damage to the kidney, such as high blood pressure that remains untreated for years, can also lead to organ failure.¹⁵⁵

Kidney transplantation is the most common type of organ transplant performed today and is now a standardized procedure. Surgical complications are rare. As with other transplant procedures, lifelong immunosuppression and close monitoring of the patient are required after the kidney is transplanted.¹⁵⁶

Not all patients with renal insufficiency can accept a transplant and dialysis is an alternative treatment. The survival rate and quality of life after successful transplantation are significantly higher than when receiving dialysis, which is physically straining and time-consuming.¹⁵⁷ Most human beings typically have two kidneys. One kidney can filter sufficient blood for the body to function normally. For this reason, the highest rate of living donation is for kidney donation, when someone with two healthy kidneys donates one kidney to someone in need of a transplant. Studies show that graft success after live donor kidney transplantation.¹⁵⁸

154	See Holznienkemper, Organspende und Transplantation, 45-46.
155	Beckmann, Kirste and Schreiber, Organtransplantation, 24-25.
156	See Nadey S. Hakim and Nicos Kessaris, "Renal Transplantation," in Hakim; Papalois, Introduction to Organ Transplantation, 84.
157	Beckmann, Kirste and Schreiber, Organtransplantation, 24.
150	Haltim and Kossaris "Popal Transplantation" 84

158 Hakim and Kessaris, "Renal Transplantation," 84.

3.2 Liver

The liver is the largest metabolic organ in humans. The organ participates in complex metabolic processes of building and remodelling carbohydrates, protein and fat, has a detoxification function, and is a storage organ for glucose compounds. In the early years of transplantation, patients were only referred for a transplant at the terminal stage of their liver disease. With improved patient and graft survival rates, liver transplantation has emerged as the optimal therapy for patients with end-stage liver disease. Cirrhosis accounts for most transplants performed, with alcoholism and hepatitis C being the two most common underlying conditions. Other transplant indications include cholestatic liver diseases, metabolic diseases, and chronic hepatitis. Transplants are also performed for liver cancer. In cases of acute liver failure, there is no alternative treatment to transplantation. A liver must then be found as quickly as possible.¹⁵⁹

The most commonly performed technique is liver transplantation with a whole organ from a diseased donor. A liver can also be transplanted as a split organ. In split-liver transplantation, a donor's liver from a deceased or living donor is divided into two parts. Typically, the left liver lobe is used for a liver transplant to a child, and the right liver lobe is used for an adult. In rare cases, the liver can also be divided in its anatomical centre, and both lobes of the liver can be used for two adolescents or physically smaller adults.¹⁶⁰

3.3 Heart

Heart transplantation is an established and highly effective therapeutic option for heart failure. The heart transplantation technique is now a standardized procedure in experienced medical centres. It is the last resort after all treatment options with drugs and pacemakers have been exhausted because there is a shortage of hearts for transplants. Generally, the indications for heart transplantation are end-stage heart failure. End-stage heart disease typically includes an array of cardiomyopathies, most commonly ischemic oridiopathic dilated disease.¹⁶¹

160 Canelo and Pai, "Liver Transplantation," 137-38.

¹⁵⁹ See Ruben Canelo and Madhava Pai, "Liver Transplantation," in Hakim; Papalois, Introduction to Organ Transplantation, 126-27.

¹⁶¹ Varun R. Kshettry and Vibhu R. Kshettry, "Heart Transplantation," in Hakim; Papalois, Introduction to Organ Transplantation, 152.

3.4 Lungs

The lungs are essential for the exchange of gases, such as oxygen. Several lung diseases lead to a restriction of oxygen exchange over time. Conditions that can be treated with a lung transplant include chronic obstructive pulmonary disease, cystic fibrosis, pulmonary hypertension, and idiopathic pulmonary fibrosis. Transplanting a single lung or both lungs may be required depending on the underlying condition. There are no alternatives to lung transplantation for end-stage organ failure patients.¹⁶² Deceased donation is still the norm for lung transplantation. Living donation is medically possible. However, only a few very experienced transplantation centres are able to perform this type of transplantation.¹⁶³

3.5 Pancreas

The pancreas has two functions: it regulates blood sugar levels by releasing insulin and produces enzymes for the digestion of proteins and fats. Transplantation of the pancreas is mainly indicated in patients diagnosed with diabetes mellitus (diabetes type I). In these cases, pancreas transplantation has proved to be a curative option. Most procedures are performed as a simultaneous pancreas-kidney transplant. pancreas-after-kidney transplants and solely pancreas transplants are also possible. However, simultaneous pancreas-kidney transplant operations. The majority of organs for pancreas transplants come from brain-dead donors and only rarely from living donors.¹⁶⁴

III. Biomedical Law and Bioethics

Medical interventions typically affect only one person. In contrast, an organ transplant involves two people: the organ donor and the organ recipient. Organ recipients need an organ to recover or survive. The rights and interests of potential organ donors may conflict with this need. The rights and interests of the organ donor differ depending on whether their organ is transplanted from them while living or when deceased. Organ transplantation laws attempt to mitigate conflicts of interest and rights by regulating organ procurement,

162	Beckmann, Kirste and Schreiber, Organtransplantation, 33.
163	Cf. Daisuke Nakajima and Hiroshi Date, "Living-Donor Lobar Lung Transplantation," <i>Journal of Thoracic Disease</i> 13, no. 11 (2021): 6594ff.
164	Nadey S. Hakim and Asim Syed, "Pancreas Transplantation," in Hakim; Papalois, <i>Intro- duction to Organ Transplantation</i> , 111-12.

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reception, and allocation. They are guided by ethical considerations such as autonomy, justice, beneficence, and nonmaleficence. These principles were first developed by the ethicists Beauchamp and Childress in 1979¹⁶⁵ and are commonly accepted in biomedical ethics.¹⁶⁶ Here, I present the fundamentals of organ transplantation law set out in the *WHO Guiding Principles for Organ and Tissue Transplantation*, which is an international legal document. The *Guiding Principles* incorporate Beauchamp and Childress's biomedical ethical principles and have informed many states' organ transplantation laws. The *Guiding Principles* also function as an indicator of consensus among the 196 member states on the topic of organ transplantation.

1. General Bioethical Principles

Bioethics, a subdiscipline of ethics or moral philosophy, reflects on the goals of life sciences and what technological advances entail at individual and societal levels. Its purpose is to make reasoned normative judgments about whether specific developments and actions are morally acceptable.¹⁶⁷ Bioethical issues often arise at the interfaces between medicine, religion, laws, and ethics. They are thus discussed in diverse academic fields, including the medical, theological, philosophical, juridical, societal, and political. Many bioethical concerns entail public policy judgments that need to be enacted and enforced. It has been suggested that bioethical concerns are prohibitions that rational people urge everyone to follow to avoid evils on which common agreement exists.¹⁶⁸ With the rise of bioethics as a field of discussion on ethically problematic issues in the life sciences, the development of guidelines and codes by judicial, professional, and governmental bodies, has expanded to enforce morally 'good' and to prohibit morally 'bad' biomedical practices.

The principles commonly accepted in biomedical ethics are those formulated by Beauchamp and Childress who popularized the application of the ethics of principlism to resolve ethical issues in clinical medicine. Both clinical medicine and scientific research generally hold that these principles can be applied as guidance in discovering the moral duties even in unique circum-

¹⁶⁵ Tom Beauchamp and James F. Childress, *Principles of Biomedical Ethics* (Oxford: Oxford University Press, 1979).

¹⁶⁶ See Annelien L. Bredenoord, "The Principles of Biomedical Ethics Revisited," in Islamic Perspectives on the Principles of Biomedical Ethics: Muslim Religious Scholars and Biomedical Scientists in Face-to-Face Dialogue with Western Bioethicists, ed. Mohammed Ghaly (London, Hackensack: World Scientific Imperial College Press, 2016), 134.

¹⁶⁷ Marcus Düwell, Bioethik: Methoden, Theorien und Bereiche (Stuttgart: J.B. Metzler, 2010), 25-26.

¹⁶⁸ George P. Smith, *Law and Bioethics: Intersections Along the Mortal Coil* (Oxon England: Routledge, 2012), 2.

stances.¹⁶⁹ Scholars base the four principles on common morality.¹⁷⁰ Although the dominant principles of bioethics were developed in the West, they are considered universal principles.¹⁷¹ This fact does not bar diverse interpretations and application of these principles from arising in various societies around the world as their interpretation and application are influenced by elements such as mentality, culture, local tradition, and religion. Engagement with these elements is decisive in establishing the best criteria with which to treat patients.¹⁷²

2. Human Rights, International Bioethical Documents, and International Medical Associations

Historically, bioethics and international human rights systems have many intriguing historical parallels. Medical ethics, for instance, provided the original core of bioethics, which is based on the tradition represented by the Hippocratic Oath.¹⁷³ The breach of the Hippocratic Oath's ethical obligation to 'do no harm' led to the conviction of Nazi doctors at the Nuremberg Trials after the Second World War for non-consensual, brutal experimentation, forced sterilization, and active nonvoluntary euthanasia. Those proceedings led to the creation of documents that remain central to medical and biomedical ethics: the Declaration of Geneva, also termed the modernized Hippocratic Oath, adopted by the General Assembly of the World Medical Association at Geneva in 1948; the International Code of Medical Ethics, based on the Declaration of Geneva and adopted by the General Assembly of the World Medical Association in 1949; and the Nuremberg Code, formulated in a decision by the Nuremberg Military Tribunal. The goal of these documents was to establish ethical principles for physicians worldwide that express their duties to their patients and colleagues and in human scientific research.174

Biomedical ethics deals with practices that affect fundamental human rights. These ethics documents can therefore be viewed as synergistic with the tripartite international Bill of Human Rights, the Universal Declaration of

- 171 Beauchamp, "A Defense of Universal Principles."
- 172 Atighetchi, Islamic Bioethics, 23-24.

¹⁶⁹ See Beauchamp and Childress, Principles of Biomedical Ethics.

¹⁷⁰ See Rosamond Rhodes, "Medical Ethics: Common or Uncommon Morality?," Cambridge Quarterly of Healthcare Ethics 29, no. 3 (2020): 404-5; Tom L. Beauchamp, "A Defense of Universal Principles in Biomedical Ethics," in Biolaw and Policy in the Twenty-First Century: Building Answers for New Questions, ed. Erick Valdés and Juan A. Lecaros (Cham: Springer, 2019), 4.

¹⁷³ See Lycurgus M. Davey, "The Oath of Hippocrates: An Historical Review," *Neurosurgery* 49, no. 3 (2001).

¹⁷⁴ Thomas Faunce, "Bioethics and Human Rights," in Ten Have; Gordijn, *Handbook of Global Bioethics*, 471.

Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Political Rights (ICESCR). Overlaps with the norms of bioethics occur in the UDHR, particularly in provisions requiring respect for human dignity and equality (Art. 1 and 2) and the human right to life (Art. 3). Other provisions resembling components of medical ethics are the prohibition of torture or cruel, inhuman, or degrading treatment or punishment (Art. 5), requiring nondiscrimination (Art. 7), freedom from arbitrary interference with privacy (Art. 12), and progressive realization of the human right to a standard of living adequate for health and medical care (Art. 25).¹⁷⁵

The UN Education, Scientific, and Cultural Organization's (UNESCO) Universal Declaration on Bioethics and Human Rights (UDBHR) is another document in which bioethics and human rights overlap. The Declaration has been praised for being the first international legal, though nonbinding, instrument that deals comprehensively with the linkage between human rights and bioethics.¹⁷⁶ The UDBHR was adopted in 2005 at the 33rd session of the General Conference of UNESCO by representatives of 191 states. The UDBHR aims to set global minimum biomedical research and clinical practice standards. The UNESCO explains this action by the growing number of scientific practices that have extended beyond national borders, the necessity of setting universal ethical guidelines covering all issues raised in the field of bioethics, and the need to promote the emergence of shared values in the international discussion.¹⁷⁷ The instrument is declaratory and encourages national legislators to draft national laws and regulations inspired by the common standards set by the Declaration.¹⁷⁸

The UDBHR presents 15 principles, including respect for human dignity, human rights and fundamental freedoms, beneficence and nonmaleficence, autonomy, informed consent, equality, justice and equity, nondiscrimination, the priority of the individual's interests and welfare over the sole interest of science or society, and respect for cultural diversity and pluralism.¹⁷⁹

On the topic of organ transplantation, the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation is the most important interna-

175	R. P. Claude and B. W. Issel, "Health, Medicine and Science in the Universal Declaration	
	of Human Rights," Health and Human Rights 3, no. 2 (1998).	
176	Roberto Andorno, "Global Bioethics at UNESCO: In Defence of the Universal Declaration	
	of Bioethics and Human Rights," Journal of Medical Ethics 33 (2007): 150.	
177	Preamble of the Universal Declaration on Bioethics and Human Rights, UNESCO (2005),	
	accessed February 2, 2023.	
178	<i>Id.</i> , art. 2.	
170	Id out 0.47	

179 Id., art. 3-17.

tional legal instrument providing an ethical and acceptable framework for the acquisition and transplantation of organs. This document formulates the general bioethical laws and principles in a sufficiently detailed manner to enable their application.

3. WHO Guiding Principle on Human Organ and Tissue Transplantation

3.1 The World Health Organization (WHO)

The WHO is the directing and coordinating authority on international health within the United Nations. Membership of the WHO is open to all United Nations member states, and the WHO has 194 member states. According to Art. 1 of its Constitution, its primary objective is 'the attainment by all peoples of the highest possible level of health'. 180 Art. 2 details the work of the Organization, which can be categorized under two main functions: first, direction and coordination of international health work, including the setting of international norms and standards in different field of health; and second, technical cooperation between members, including research and the provision of advice and assistance upon request. The members' obligations include implementing regulations adopted by the Assembly following Art. 21 and 22 of the Constitution. These specific requirements are part of the overall obligation that each state accepts when it becomes a member of the WHO. The obligation is enshrined in the Preamble to the Constitution, which stipulates that 'Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures'.181

The WHO's primary role is directive and normative. Chapter V of the WHO Constitution details the normative functions of the Organization in the Health Assembly and provides for three types of legal instruments: (1) conventions and agreements, (2) regulations, and (3) recommendations. Setting various recommendations and other nonbinding standards is the Organization's most prolific and successful activity. The flexibility stemming from the nonbinding nature of the standards, and sometimes their informal nature, is coupled with the credibility of the WHO as a scientifically and technically reliable organization. Purely recommendatory and illustrative documents have proved to be adaptable to very different national circumstances and to elicit compliance and adherence through their technical and political soundness. The standardsetting activities of or coordinated by the WHO partly overlap with the Organization's functions of direction and coordination assigned to it by Art. 2 of the Constitution. This aspect of the normative functions of WHO takes place at different levels and is legal, political, and practical, and thus sometimes obscures the provenance of specific recommendations.¹⁸²

There are three broad categories of standards: (1) regulatory recommendations adopted by the Health Assembly or, within the limits of its constitutional functions, by the Executive Board; (2) standards and recommendations developed by the Secretariat on the basis of a grant of authority by a governing body but not endorsed or approved as such by that body; and (3) standards developed by expert bodies convened by the Secretariat and published by the WHO without formal endorsement.¹⁸³ Most recommendations, guidelines, and standards do not take the form a full-fledged regulatory text approved by the Assembly but of technical documents elaborated by groups of experts.184 Once they are published, the conclusions and recommendations of the various committees and groups convened by the Secretariat to advise the Organization are identified as the positions of the Organization on the scientific issues in question. When it is felt desirable or necessary to obtain a formal political endorsement of the position emanating from the expert group system, the matter is submitted to the Health Assembly for formal endorsement, and thereby becomes an official position of the Organization's policy.185

3.2 An Introduction to the WHO Guiding Principles

The WHO is involved in harmonizing global practices in the procurement, processing, and transplantation of human organs. In 1991, the 44th World Health Assembly endorsed the *WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation* in resolution WHA44.25.¹⁸⁶ Since then, the *WHO Guiding Principles* have greatly influenced professional codes and practices and legislation in the member states and all around the world.¹⁸⁷ In May 2004, the World Health Assembly Resolution WHA57.18 on Human Organ and Tissue Transplantation adopted the revision of the *WHO Guiding Principles* of 1991 in

¹⁸² Gian Luca Burci and Claude-Henri Vignes, World Health Organization (The Hague: Kluwer Law International, 2004), 141-42.

¹⁸³ Burci and Vignes, *World Health Organization*, 141-42.

¹⁸⁴ Burci and Vignes, *World Health Organization*, 146.

¹⁸⁵ Burci and Vignes, World Health Organization, 149.

¹⁸⁶ Human Organ Transplantatin of 13 May 1991 (WHA44.25), WHO (1991).

¹⁸⁷ WHO, "Human Organ and Tissue Transplantation: Report by the Secretariat (WHA63.24)," WHO, n 1; Sadek Beloucif and Mohamed S. Ben Ammar, "Bioethics in Arab Region and the Impact of the UNESCO International Bioethics Committee," in *Global Bioethics: The Impact of the UNESCO International Bioethics Committee*, ed. Alireza Bagheri, Jonathan D. Moreno and Stefano Semplici (Cham: Springer, 2016), 154.

light of changes in practices and attitudes to organ and tissue transplantation. The revised *Guiding Principles* aim to provide a framework that supports progress in the transplantation of cells, tissues, and organs that maximizes the benefits of transplantation. It does so by aspiring to meet the needs of recipients, protecting donors, and ensuring the dignity of all involved.¹⁸⁸ The member states that were involved in the consultation process confirmed the view that seeking financial gain from the human body and its parts undermines the benefits of transplantation. This view draws upon experience from all over the world indicating that commercial trade in this area leads to the exploitation of people in poverty and the vulnerable. Thus, the ban on commercial organ transplantation was again confirmed in the revised *Guiding Principles*.¹⁸⁹ In May 2010, the 63rd World Health Assembly adopted resolution WHA63.22. The resolution endorsed the updated *WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation* and urged the member states to implement them in their national policies, laws, and other legislation.¹⁹⁰

The Guiding Principles provide an orderly, ethical, and acceptable framework for acquiring and transplanting human cells, tissues, and organs for therapeutic purposes. The means of implementing the WHO Guiding Principles in the national legal framework is left to be decided by the member states.¹⁹¹ The WHO Guiding Principles of 2010 preserve the essential points of the 1991 version and incorporate new provisions in response to current trends in transplantation, particularly organ transplants from living donors. The WHO Guiding Principles emphasize voluntary donation and noncommercialization, a preference for deceased donation rather than living, and related living donation over unrelated.¹⁹² The WHO Guiding Principles presuppose that individuals have the right to decide what happens to their body and body parts. However, the right of disposal and self-determination in organ transplantation is not without limit. Human dignity is commonly seen as prohibiting the commercialization and trade in organs and preserving the life and health of the donor. The right of self-determination also exists for post mortem donation. The WHO Guiding Principles state that expressed or presumed consent should be given regarding post mortem donation during the lifetime. A selection of the most important principles of the Guiding Principles of 2010 are introduced below.

188	WHO, "WHA63.24," n 5.
189	WHO, "WHA63.24."
190	WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, WHO at n 1 (2010).
191	<i>Id.</i> , n 4.
192	WHO, "WHA63.24," n 4.

a Consent to Living Donation

The *WHO Guiding Principles* determine consent as the ethical cornerstone of organ transplantation.¹⁹³ Principle 3 states that living donation is acceptable when the donor's informed and voluntary consent is obtained. This Principle names a few elements that need to be respected for consent to be informed and voluntary: 'Live donors should be informed of the probable risks, benefits and consequences of donation completely and understandably; they should be legally competent and capable of weighing the information; and they should be acting willingly, free of any undue influence or coercion' (Principle 3).

The criteria of consent are derived from the bioethical principle of autonomy. In ethics, autonomy assumes that rational agents make informed and voluntary decisions. In health care decisions, respect for the autonomy of the patient means that the patient can act intentionally, with understanding, and without controlling influences, especially from the inherent physician-patient power imbalance, that would mitigate against a free and voluntary act.¹⁹⁴ This Principle is the basis for the practice of 'informed consent' in the physicianpatient transaction of health care. Informed consent is shorthand for informed, voluntary, and decisionally competent consent.¹⁹⁵ According to Principle 3, 'the Principle underscores the necessity of genuine and well-informed choice, which requires full, objective, and locally relevant information and excludes vulnerable persons who are incapable of fulfilling the requirements for voluntary and knowledgeable consent.¹⁹⁶

In its most essential role, informed consent is a legitimacy requirement for medical intervention designed to avoid civil, and possibly also criminal, liability.¹⁹⁷

b Other Requirements for Living Donation

For living donation, Principle 3 also demands that adequate professional care of donors must be ensured, follow-up treatment must be well organized, and

193	WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, commentary principle 1.
194	Nir Eyal, "Informed Consent," in <i>The Stanford Encyclopedia of Philosophy</i> , ed. Edward N. Zalta, Spring 2019 Edition.
195	Eyal, "Informed Consent," Spring 2019 Edition; Beauchamp and Childress, <i>Principles of Biomedical Ethics</i> , 124.
196	WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, commentary principle 3.
197	David P. T. Price, <i>Legal and Ethical Aspects of Organ Transplantation</i> (Cambridge: Cambridge University Press, 2000), 272.

donor selection criteria must be scrupulously applied and monitored. The commentary to Principle 3 elaborates that protecting the health of living donors during selection, donation, and aftercare is critical to ensure that the potential consequences of the donation are unlikely to disadvantage the remainder of the donor's life. The WHO stresses that care for the donor should match care for the recipient, and health authorities have the same responsibility for the welfare of both.¹⁹⁸

Principle 3 also states a preference for a genetic, legal, or emotional relationship between the living organ recipient and donor because many altruistic donations originate from emotionally related donors. Donations from unrelated donors have been a source of concern due to the threat of coercion and commercialism.¹⁹⁹ The *WHO Guiding Principles* only accept altruistic donations and ban commercial donations (Principle 5). Principle 3 also favours deceased donation over living donation to avoid the inherent risks to live donors.²⁰⁰

c Consent in Deceased Donation

Principle 1 determines that organs may be removed from the bodies of deceased persons under the condition that any consent required by law is obtained and that there is no reason to believe that the deceased person objected to such removal. The WHO refers here to the two prevalent systems of obtaining consent during a person's lifetime for donation after death. Consent can be either explicit or presumed, depending upon each country's social, medical, and cultural traditions, including how families are involved in decision-making about health care generally. Under both systems, however, any valid indication of a deceased person's opposition to posthumous removal of their cells, tissues, or organs will prevent such removal.²⁰¹

The presumed consent system, also termed the 'opt-out' model, permits organs to be removed from the body of a deceased person for transplantation unless the person had expressed his or her opposition before death. Consequently, the WHO requires states to ensure that people are fully informed about the policy and are provided with an easy means to opt out. The requirements for consent in this system do not fulfil the requirements demanded by the informed consent concept.²⁰²

198	WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, commentary principle 3.
199	Id.
200	Id.
201	<i>Id.</i> , commentary principle 1.
202	Id.

Under the regime of explicit consent, or 'opt-in', if the deceased has neither consented nor clearly expressed opposition to organ removal, the WHO states that permission should be obtained from a legally specified surrogate, usually a family member.²⁰³

d Other Requirements for Deceased Donation

Principle 2 requires that physicians determining the death of a donor are not directly involved in organ removal from the donor or subsequent transplantation procedures. This principle is designed to avoid conflicts of interest. It bars physicians determining death from any involvement in organ removal and relieves them of the double role and potentially conflicting duties of care.

Regarding the death criteria required for a deceased donation, the *WHO Guiding Principles* only require national authorities to set out the legal standards for determining that death has occurred and to specify how the criteria and process for determining death is to be formulated and applied.²⁰⁴ The WHO refrains from specifying general death criteria for postmortem donation and leaves this matter for states to regulate.

e Restrictive Practices in Donation from Minors

The WHO stipulates in Principle 4 that, in general, no organs should be removed from a living minor. Narrow exceptions are possible but need to be regulated under national law, such as kidney transplants from identical twins. Even in these exceptional cases, a minor's consent should be obtained before donation. Furthermore, specific measures should be in place to protect the minor because the permission of the parent(s) or the legal guardian is usually sufficient for medical procedures in the interest of the minor. These measures include the possibility of review and approval by an independent body, such as a court or other competent authority, to ensure no undue pressure has been applied to the decision to donate.²⁰⁵ Principle 4 regulates that what applies to minors also applies to any person lacking legal competence. However, the *WHO Guiding Principles* do not, address the issue of donation by mentally incapacitated persons.

f Organ Allocation

Principle 9 states that the allocation of organs should be guided by clinical criteria and ethical norms and not by financial or other considerations. Further-

203	Id.
204	Id., commentary principle 2.
205	<i>Id.</i> , commentary principle 4.

more, allocation rules should be defined by appropriately constituted committees guided by equity and transparency. The criteria should also be externally justified (Principle 9). The principle proposes that allocation criteria should maximize potential benefits and, therefore, be based on medical criteria. At the same time, allocation criteria should be ethical, which means also considering nonmedical criteria such as the time spent on the waiting list for an organ.²⁰⁶ The commentary to Principle 9 adds that allocation criteria should be defined at the national level by a committee that includes experts in the relevant medical specialities, bioethics, and public health to ensure that allocation incorporates not only medical factors but also community values and general ethical rules.207

Donor and Receiver Safety g

Principle 10 of the WHO Guiding Principles regulates that the procedures should be high quality, safe, and efficacious. The long-term outcomes of donation and transplantation should be assessed for both the living donor and the recipient to document benefits and harm. Furthermore, human organ safety, efficacy, and quality for transplantation must be continuously optimized. The commentary to Principle 10 elaborates that both donors and recipients need to receive appropriate care, including information on the transplantation team responsible for their care. The information given on the long-term risks and benefits is essential to the consent process and for adequately balancing the interests of donors and recipients.208

Principle 11 also aims to minimize the harm to donors and recipients and maximize the availability of data for scholarly study and governmental oversight.²⁰⁹ Principle 11 stipulates that the organization and execution of donation and transplantation activities and their clinical results must be transparent and open to scrutiny while ensuring that the personal anonymity and privacy of donors and recipients are always protected.

h Ban on Commercial Donation

Principle 5 bans commercial organ donation by stipulating that organs should only be donated freely without any monetary payment or other rewards of monetary value. This ban on sales applies to both living donors and the next

206	Price, Legal and Ethical Aspects, 457.
207	WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, commentary principle 9.
208	<i>Id.</i> , commentary principle 10.
209	<i>Id</i> commentary principle 11

of kin of deceased persons. The WHO bans commercial donation in the belief that organ payment takes unfair advantage of the poorest and most vulnerable groups, undermines altruistic donation, and leads to profiteering and human trafficking. The WHO also states that payment conveys the idea that some people lack dignity: that they are mere objects to be used by others.²¹⁰

Principle 5 also states that the prohibition on the sale or purchase of organs does not preclude reimbursing reasonable and verifiable expenses incurred by the donor, including loss of income or paying the costs of recovering, processing, preserving, and supplying organs for transplantation.

The WHO states in the commentary to Principle 5 that this principle aims to affirm the exceptional merit of donating human materials to save and enhance life. Therefore, the provision of tokens of gratitude or gifts to the donor is allowed. However, this token cannot be assigned a value in monetary terms. The states are responsible for ensuring that any gifts or rewards are not, in fact, disguised forms of payment for donated cells, tissues or organs.²¹¹

Commercial donation raises the issue of voluntariness of donation. Generally, consent is invalidated by compulsion, physical force, coercive threats or offers, and defective beliefs induced by fraud or mistakes. In addition, consent is not considered voluntary if the incentive for donation is monetary gain.²¹²

Principle 7 prohibits physicians and other health professionals from engaging in transplantation procedures if the cells, tissues, or organs to be transplanted were obtained through exploitation or coercion of, or payment to, the donor or the next of kin of a deceased donor. In these cases, health insurers and other payers are requested not to cover such procedures. The commentary to Principle 7 elaborates that failing to ensure that the person consenting to the donation has not been paid, coerced, or exploited breaches professional obligations and should be sanctioned by the professional organizations and government licensing or regulatory authorities.²¹³

Principle 6 stipulates that the promotion of altruistic donation may be allowed. However, advertising to offer or seek payment for organs should be prohibited. Brokering involving payment to such individuals or third parties should also be prohibited.

210	Id., commentary principle 5.	
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211	Id.
211	

212 See Price, Legal and Ethical Aspects, 290.

²¹³ WHO Guiding Principles on Human Cell, Organ and Tissue Transplantation, commentary principle 7.

IV. Organ Transplantation in Islamic Law

The rapid and unprecedented advances in biomedical technology have enhanced human life but raise ethical questions in dealing with these new technologies. Bioethics were developed in the West initially as a scientific discipline of ethics or moral philosophy to connect biomedical advancements with human moral and ethical values and thus guarantee human dignity. However, the questions and concerns raised by biomedical advancements are reflected on not only from a philosophical point of view but also from various religious standpoints. Religious ethical and legal norms are not generally binding and are not to be equated with the law applicable in a state – a fact which is sometimes overlooked, especially in connection with the Islamic world.²¹⁴

In the Islamic world, the possibilities of novel medical procedures have been an important topic since the 1950s. Bioethical issues are mainly discussed from a legal point of view, which means the debate is oriented toward identifying rules. The majority of bioethical contributions in the Muslim world deal with topics of 'special bioethics', such as contraception, abortion, medically assisted reproduction, cloning, and transplants; only a minority deals with 'fundamental bioethics', including reflections on the epistemology of bioethics.²¹⁵ The legal discourse in Islamic jurisprudence on biomedical issues is very dynamic. Muslim legal scholars face genuinely novel issues on which the tradition has not clearly itself expressed or on which it has made no pronouncements. Because no direct answers can be found in the Islamic tradition, Muslim legal scholars need to interpret the sources to find answers.²¹⁶ Important reference points for Muslim legal scholars in finding normative positions are primarily Islam's foundational sources, the Quran and the sunna, and the methods of legal derivation developed in Islamic jurisprudence. Other reference points rooted in the various scholarly disciplines of Islamic tradition are Islamic philosophy in general and moral philosophy, called *akhlāq*, in particular theology and mysticism.²¹⁷ Positions on novel medical issues are formulated primarily as fatwas (legal opinions), which are authoritative but legally nonbinding.²¹⁸

- 215 Atighetchi, Islamic Bioethics, 13.
- 216 Atighetchi, Islamic Bioethics, 13-14.

217 See Ayman Shabana, "Bioethics in Islamic Thought," Religion Compass 8, no. 11 (2014).

218 Atighetchi, Islamic Bioethics, 14.

²¹⁴ Martin Kellner, Islamische Rechtsmeinungen Zu Medizinischen Eingriffen an Den Grenzen Des Lebens: Ein Beitrag Zur Kulturübergreifenden Bioethik, Mitteilungen zur Sozial- und Kulturgeschichte der islamischen Welt 29 (Würzburg: Ergon, 2010), Diss. Univ. Wien, 2007, 23.

Currently, the most broadly representative positions are formulated by pan-Muslim congresses and conferences, such as the Muslim World League, the Organisation of the Islamic Conference, and various national fatwa committees. However, not only do religious actors contribute to this field but so too do nonreligious actors, such as national biomedical bodies and other national authorities, jurists of state law, and academics, all of whom often discuss issues not only in scientific publications but also in broad media publications.²¹⁹

In the following, the focus is on religious legal positions on organ transplantation.

1. Medical Issues in Islamic Legal Tradition

1.1 Medicine and Ethics

Medical scholarship and practice are long-established disciplines in the Islamic tradition. Before the rise of modern medicine, medical scholarship was heavily influenced by ancient Greek medicine, particularly the theory of humorism. The doctrine of humoral pathology formulated by the Greek physician Galen of Pergamon (d. 216 CE), called 'Galenism',²²⁰ formed the basis of nearly all learned Arabic medical discourses. Four important medical encyclopaedias were written in 10th and 11th centuries by Zakariyyā al-Rāzī, known by the Latin name Rhazes, a famous physician and philosopher, and Ibn Sīnā, known as Avicenna and also an influential physician, scientist, philosopher, and jurist. These encyclopaedias dominated medicine in the Islamic world for centuries.²²¹

Alongside Hellenistic humoral medicine, another medical approach flourished based on religious sources. The *hadīth* contain information about how the Prophet treated illnesses and what he advised. This led to the development of the genre called *tibb al-nabī* (medicine of the Prophet) or *tibb al-nabawī* (Prophetic medicine) as an alternative to the established Greek-origin medical system. The authors of this genre were mainly clerics rather than physicians and advocated the medical practices of the Prophet's day. The basis of Prophetic medicine was the Quran and the reports in the Prophet's *hadīth* and *sunna*.²²²

²¹⁹ Atighetchi, Islamic Bioethics, 14.

²²⁰ Galenism links the four humours (blood, phlegm, yellow bile and black bile) to the four primary qualities (wet or dry and cold or warm), the four elements (fire, water, earth, and air) and four major organs (heart, brain, liver, and spleen). No person has a perfect balance of the humours, but an excess of one of them was considered harmful and therefore needed to be counterbalanced through diet or removal of e.g. blood, see Peter E. Portmann and Emilie Savage-Smith, *Medieval Islamic Medicine* (Edinburgh: Edinburgh University Press, 2007), 40-45.

²²¹ E. Savage-Smith, F. Klein-Franke, and M. Zhu, "Tibb," in Bearman et al., *Encyclopaedia* of Islam, Second Edition.

²²² Savage-Smith, Klein-Franke and Zhu, "Țibb."

Traditional Islamic scholarship also treated the ethics of medicine and medical practice in the *adab* and *akhlāa* literature. *Adab* has a wide range of meanings and is also used to designate a particular type of literature that aims at refining the character at a personal and professional level. Akhlāq is also used to designate ethics; it means morality or character and is used in contemporary Islamic ethical debates, including bioethical ones. While in present day European intellectual thought, a distinction is made between morality, 'what is commonly felt and done', and ethics, 'what is appropriate and rational', in Islamic tradition, the distinction between the two disciplines is not as apparent because 'ilm al-akhlāg (knowledge of morality) is also the science of ethics.²²³ The most well-known text on medical ethics in this tradition is the treatise written by Ishāq ibn 'Alī al-Ruhāwī in the 9th century with the title Adab al-tabīb, meaning 'proper conduct or practical ethics of the physician'. The work discusses the physician's proper conduct, manner, and appearance to appear dignified and inspire confidence in the patient. Other moral imperatives in medical practice, as given in the Hippocratic oath, were to employ medicine for the patient's benefit, not to harm them, and not to violate the patient's confidence.224 This genre of adab literature is still prominent today. These works refer to universal virtues while referring to verses of the Quran and sayings of the Prophet to emphasize that these virtues are an integral part of Islam.²²⁵

1.2 Medical Discourses in the Islamic Legal Tradition

Juristic discourses found in the sources focus on the question of legal liability in medical practice and the extent to which a medical practitioner may be held accountable for injuries resulting from medical errors. The basis of these debates is a Prophetic *hadīth* that says that 'whoever practices medicine without being known as a competent practitioner shall be held accountable for any injury that he may cause'. The background of these debates is the assumption that medical practice's ultimate purpose is to benefit human beings. However, invasive medical procedures could compromise the *hurma* (dignity; sanctity) of the human body and consequently violate its inherent *karāma* (dignity).²²⁶

²²³ Ataullah Siddiqui, "Ethics in Islam: Key Concepts and C\$Contemporary Challenges," Journal of Moral Education 26, no. 4 (1997): 423; Aasim I. Padela, "Islamic Medical Ethics: A Primer," Bioethics 21, no. 3 (2007): 170.

Portmann and Savage-Smith, Medieval Islamic Medicine, 89, 90.

²²⁵ Padela, "Islamic Medical Ethics," 170.

²²⁶ Ayman Shabana, "Islamic Law and Bioethics," in *Routledge Handbook of Islamic Law,* ed. Khaled Abou El Fadl, Ahmad A. Ahmad and Said F. Hassan (London, New York: Routledge, Taylor & Francis Group, 2019), 114.

Jurists of the various schools developed guidelines to govern and regulate liability for medical errors. The question of whether an incompetent physician should be held liable was seen to be answered by the hadith mentioned above.227 In the case of medical errors by competent physicians, darūra (necessity) was brought forward as an argument to justify for the error. Because medical practice was seen to be indispensable for the well-being of society, the jurists argued that holding competent physicians accountable for errors would discourage people from pursuing and practising this profession, which would in turn cause greater harm at the collective level. The jurists saw another ground for the removal of legal liability in the consent of the patient or their family and the intent of the medical practitioner.²²⁸ The practitioner's conduct should be guided by the intention to benefit the patient, not to cause harm even when the patient has given consent. The intention should be investigated considering the professional standards known among experienced practitioners. Other jurists argued that the liability of the practitioner could only be negated by the ruler's permission to the practitioner to practise the profession.²²⁹ Established professional standards would determine the extent to which an injury was a result of a common inadvertent error or an uncommon excessive one; this took into account the established professional standards of the profession.230

2. Fatwas Establishing Relious-Legal Norms Today

2.1 Fatwas as Source of Legal Knowledge

The Islamic juridical tradition seeks to address and balance the demands of justice and public good to fulfil divine will. The source of ethical discussions lies in the Quran and *sunna* and their legal concretization in the sharia and *fiqh*. Muslim jurists use legal principles and rules to justify and assess all human actions. Actions are ethically, morally, and legally assessed according to sharia law, which is not only Islam's legal code but also its moral code. Every human act is categorized as *fard* or *wājib* (mandatory), *mandūb* or *mustaḥabb* (recommended), *mubāḥ* (permitted), *makrūh* (reprehensible), or *ḥarām* (forbidden).²³¹

In dealing with immediate questions, including organ donation, Muslim jurists draw on legal doctrines and rules and analogical reasoning from par-

^{227 &#}x27;Abd al-Qadir 'Awda, Al-Tashri' al-Jinā'i al-Islāmi Muqāranan bi-l-Qānūn al-Wad'i, Vol. 1 (Cairo: Maktabat Dār al-Turāth, 2003), 448-52, cited in Shabana, "Islamic Law and Bioethics," 114.

²²⁸ Ahmad Sharaf al-Din, Al-Aḥkām al-Sharʿīyya li-l-Aʿmāl Tibbīyya (Cairo: n.p., 1987), 43, cited in Shabana, "Islamic Law and Bioethics," 114.

^{229 &#}x27;Awda, *Al-Tashri*', 449-51, cited in Shabana, "Islamic Law and Bioethics," 114.

²³⁰ Shabana, "Islamic Law and Bioethics," 114.

²³¹ Padela, "Islamic Medical Ethics," 170-171, 173-174.

adigm cases to arrive at casuistic decisions. The practical judgements and legal opinions, known as fatwas, reflect the insights of a jurist who has been able to connect cases to an appropriate set of linguistic and rational principles that can provide a basis for a valid conclusion of a given case.²³² In other words, every conclusion or opinion expressed in a fatwa uses principles and methods of *fiqh* and derives concrete commands from general rules to fulfil God's will. In this process, Islamic law is constantly reproduced and renewed from case to case and over time.²³³ Thus, fatwas are also a source of legal knowledge. Fatwas provide information about what is legal in Islamic law and thus what is normatively binding for a Muslim.²³⁴

2.2 Fatwas as Authoritative Legal Opinions

Fatwas are crucial to the study of contemporary Islam. When Muslims need guidance, they can seek the opinion of a scholar recognized as competent in Islamic jurisprudence. A petitioner asks a legal scholar, called a *muftī* or *mujta-hid*, a specific question in private, orally or in writing, and then receives a reply through a fatwa. Fatwas can also be issued as a public statement, for instance in the media, and by fatwa-issuing councils instead of an individual scholar. Consequently, fatwas can be accessed widely today in fatwa collections and presented in monographs, magazines, and newspapers and on the internet.²³⁵

To issue fatwas, the *muftī* must be legally mature, a reliable, trustworthy person learned in Islamic law, of sound mind and proper conduct.²³⁶ Because every *muftī* that fulfils these criteria can issue a fatwa, the question arises whether some fatwas are more authoritative than others, and thus, whether there is a hierarchy among the religious scholars and institutions that issue fatwas. Sunni Islam in theory recognizes no hierarchy. However, a certain hierarchy can be observed on biomedical topics. The literature finds that the following institutions in Sunni Islam are seen to be the most authoritative: the University of al-Azhar, which is an ancient and renowned religious university in Cairo, Egypt, and the fatwa-producing councils such as the Muslim World League in Mecca, Saudi Arabia, and the International Islamic Fiqh Academy

²³² Abdulaziz Sachedina, Islamic Biomedical Ethics: Principles and Application (2009), 27.

²³³ Birgit Krawietz, Die Hurma: Schariatrechtlicher Schutz vor Eingriffen in die körperliche Unversehrtheit nach arabischen Fatwas des 20. Jahrhunderts (Berlin: Duncker & Humblot, 1991), 25, 28.

²³⁴ Krawietz, Die Hurma, 83.

²³⁵ Clarke, Islam and New Kinship, 67.

²³⁶ Vardit Rispler-Chaim, Islamic Medical Ethics in the Twentieth Century (Leiden: Brill, 1993), 3-4.

in Jeddah, Saudi Arabia, which is a subsidiary organ of the Organization of Muslim Cooperation.²³⁷

In Shia Islam, the hierarchy of legal authority is stricter than in Sunni Islam. In general, a legal scholar, called a *mujtahid*, who has proven himself capable of *ijtihād*, has the authority to issue fatwas. A *marjaʿal-taqlād* ('model' or 'source of imitation') will emerge among *mujtahids*. A *marjaʿ*is considered a high-ranking Shia scholar whose fatwas can be followed by lay Shiites.²³⁸ At present, there are several supreme figures. The standing and influence of these *marjaʿ*depend on how many followers they have. Every Shiite should choose one *marjaʿ* whose fatwas they follow in all matters.²³⁹

In general, fatwas are not legally binding. A fatwa can become legally binding if a state chooses to incorporate the ruling of a fatwa. However, even if a state does not incorporate a fatwa ruling in a state law, Muslim regimes cannot ignore pious scholarly voices and their potential criticisms, especially those from the most influential and popular *marja*'s. This applies especially to the field of biomedicine, which is a religiously sensitive topic. Thus, several Muslim states incorporate religious scholars in their law-making processes.²⁴⁰

Even though fatwas are not automatically legally binding, they are authoritative for believers.²⁴¹ In Sunni Islam, a fatwa is considered binding for the believer of the school of law that has issued the fatwa; in Shia Islam, a fatwa is considered binding for the adherent of the *marja*⁶ who has issued the fatwa. If the believer is convinced of the truth of the answer, they are bound by it, and the believer will usually follow the expressed opinion if they want to act by Islamic law. To act by God's will is the most important duty for a Muslim to receive salvation.²⁴²

237	Clarke, Islam and New Kinship, 98.	
238	Linda S. Walbridge, "Introduction: Shi'ism and Authority," in <i>The Most Learned of the Shi'a: The Institution of the Marja' Taqlid</i> , ed. Linda S. Walbridge (New York: Oxford Academic, 2001), 4.	
239	Walbridge, "Introduction," 11.	
240	Aasim I. Padela et al., "Using Fatawa Within Islamic and Muslim Bioethical Discourse: The Role of Doctrinal and Theological Considerations," in <i>Islam and Bioethics</i> , ed. Berna Arda and Vardit Rispler-Chaim (Ankara: Ankara University, 2011), 154.	
241	Padela et al., "Using Fatawa," 154.	
242	Rispler-Chaim, Islamic Medical Ethics, 4; Krawietz, Die Hurma, 22; Mahomoud Farouk,	

242 Rispler-Chaim, Islamic Medical Ethics, 4; Krawietz, Die Hurma, 22; Mahomoud Farouk, "Controversies in Islamic Evaluation of Assisted Reproductive Technologies," in Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, ed. Marcia C. Inhorn and Soraya Tremayne (New York, Oxford: Berghahn Books, 2012), 72.

3. Principles of Bioethics Based on Islamic Jurisprudence

Various principles are applicable to interpersonal relations and their evaluation in Islamic law. A few are, however, frequently cited in the literature on Islamic bioethics and the documents of regional groups, such as the Islamic Code of Medical Ethics promulgated in Kuwait in 1981 by the First International Conference on Islamic Medicine and the Islamic Code of Medical and Health Ethics endorsed by the WHO's Regional Committee for the Eastern Mediterranean in their 52nd session in 2005. Other rulings, especially on particular aspects of bioethics, are also published by other collective bodies of legal scholars, such as the *Majmaʿal-fiqhi al-islāmī* (Islamic Juridical Council) of the World Muslim League in Mecca, Saudia Arabia.²⁴³

The principles are based on the Quran and the *sunna*. Most of them are related to the principles of legal jurisprudence for the derivation of normative rulings to find solutions.²⁴⁴ Sachedina sees the basis of ethical theories known among Muslims to be human reason and its substantive role in deriving legal-ethical decisions, not only by reference to the principles of legal jurisprudence but also from prescriptive precedents. The precedents are derived from the primary sources of Islam and serve as paradigmatic cases for casuistic decisions. Moreover, he finds that ethical reflection occurred within the Islamic tradition as a process of discernment of principles that were embedded in propositional statements in fatwas and the approved practice of the earlier jurists.²⁴⁵

However, publications on bioethics in the Muslim context do not refer solely to principles developed in Islamic jurisprudence but frequently refer to the principles developed in Western bioethics that are also expressed in the sacred sources of Islam. These principles are mainly taken from Beauchamp and Childress's ethics of principles. The principle of autonomy promotes respect for the freedom of choice of a competent individual and the protection of an incompetent person. The principle of beneficence promotes the well-being of other people. The principle of nonbeneficence promotes not doing evil, and the principle of justice promotes the fair allocation and distribution of health costs and benefits.²⁴⁶ The existing studies on bioethics in the Muslim context identify these 'Western' principles in the Muslim sacred texts, which according to Atighetchi is not surprising because almost all religions adjure their

²⁴³ Sachedina, Islamic Biomedical Ethics, 47.

²⁴⁴ Sachedina, Islamic Biomedical Ethics, 47.

²⁴⁵ Sachedina, Islamic Biomedical Ethics, 45.

²⁴⁶ Beauchamp and Childress, Principles of Biomedical Ethics.

believers to do good, to avoid evil, and to apply justice. The principle of autonomy can be found, for instance, in the value of man as Vicar of God on earth and amongst these passages in the Quran: 'We have honoured the children of Adam; provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favours' (Quran [17:70]). On the promotion of good, Quran [3:104] is often cited: 'Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong'. Not doing evil is also advised in the Quran: 'God commands justice, the doing of good, and liberality to kith and kin, and He forbids all shameful deed, and injustice and rebellion' (Quran [16:90]).²⁴⁷

3.1 Healing and Receiving Medical Treatment

The general view prevails in the Islamic legal tradition that medical practice is a fard kifāya (collective duty), which is held in high esteem due to its great need at the individual and societal levels.²⁴⁸ The fundamental principle is based on the Quran [5:32], which says: 'If anyone saved a life, it would be as if he saved the life of the whole people'.249 According to the Islamic Code of Medical and Health Ethics adopted by the Regional Committee for the Eastern Mediterranean of the WHO in their 52nd session in 2005, the scholars of Islamic civilization have held medicine in high regard. They have cited the scholar Al-Salaam, who wrote in his treatise Qawā'id al-ahkām fī masālih al-an'ām (The principles of rulings on people's affairs) that 'medicine is like legislation; it is instituted to bring the benefits of safety and well-being and ward off the harm of malfunctions and ailments... He who has instituted legislation has also instituted medicine; each of them is instituted to bring benefits to people and ward off any harm to them'.²⁵⁰ Medical practice is deemed essential for preserving life. Preservation of life is identified as one of the five magasid al-shari'a (goals of sharia) together with the preservation of religion, intellect, progeny, and property. These aim at preserving the essentials of human well-being and are seen as God's purposes in revealing the divine law.²⁵¹

Farḍ kifāya concerns not only medical professionals but all Muslims. Quran [5:32] cited above speaks to every Muslim. It is a collective duty to save

247	See Atighetchi, Islamic Bioethics, 21.
248	Kellner, Islamische Rechtsmeinungen, 113.
249	Atighetchi, Islamic Bioethics, 37.
250	Cited in WHO Regional Committee for the Eastern Mediterranean, "Islamic Code of
	Medical and Health Ethics (EM/RC52/7)," WHO Regional Committee for the Eastern
	Mediterranean, n 3.

²⁵¹ Shabana, "Islamic Law and Bioethics," 113 For the higher objectives of sharia, see R. M. Gleave, "Makāşid Al-Sharī'a," in Bearman et al., Encyclopaedia of Islam, Second Edition.

a life if possible. According to the Islamic Code of Medical Ethics endorsed by the First International Conference on Islamic Medicine in Kuwait in 1981, individual patients are the collective responsibility of society, which has to ensure their health without inflicting harm on others. The document specifically refers to the donation of organs as a *farḍ kifāya*, a duty that donors fulfil on behalf of society.²⁵²

On the permissibility of pursuing medical treatment, the general view prevails that Islam encourages its followers to take care of themselves and not to lose hope while confirming that everything is predestined.²⁵³ According to Muslim belief, the problems of human beings are predestined by God, who asks His believers to make an effort to overcome their problems. Recourse to medicine and treatment does not contradict submission to the divine. The religious justification for recourse to medical treatment appears in the wellknown *hadīth* by Bukhari: 'There is no disease that Allah has created, except that He also has created its treatment'. For most jurists, recourse to treatment seems indispensable to obtain recovery, which is granted only by God, according to the Quran [26:80]: 'And when I am ill, it is He who cures me.' This sura is mirrored in a *hadīth*: 'There is a remedy for every malady, and when the remedy is applied to the disease, it is cured with the permission of God'.²⁵⁴

3.2 Maşlaha

Maşlaḥa (the principle of public interest or common good) is a method of legal jurisprudence. Consideration of public interest and the common good of the people has been an important principle for Muslim jurists in accommodating new issues. *Maşlaḥa* stems from the notion that the ultimate goal of the sharia requires serving justice and people's interests in this and the next world. Muslim jurists have identified five *maqāsid al-sharīʿa* (goals of sharia) in protecting collective interests: the protection of religion, the soul, the intellect, children, and property. The principle of *maşlaḥa* is closely connected with altruism, which is rooted in Quran [5:2]: 'Help ye another in righteousness and piety'. The rational obligation to weigh and balance an action's possible benefits against its costs and possible harms is central to social transactions in general and biomedical ethics in particular.²⁵⁵

²⁵² Islamic Code of Medical Ethics, First International Conference on Islamic Medicine Kuwait at 10 (1981).

²⁵³ Shabana, "Islamic Law and Bioethics," 114, 115.

²⁵⁴ See Atighetchi, *Islamic Bioethics*, 32-33.

²⁵⁵ Atighetchi, Islamic Bioethics, 37.

One of the consequences of considering the public good is that rules are inevitably adapted to changes in social circumstances, and these require reassessment of what serves the people's interests. This principle helps develop rulings that are relative to the situation, mutable, and hence specific to the logic of time and space. It even allows for alteration and adaptation in cases that go against the apparent sense of religious texts. Other principles that help jurists in providing solutions to new problems that emerge in the different societies are methodological stratagems that use *qiyās* (analogical reasoning), *istislāḥ* (considering the universal good), *istiḥsān* (considering something to be better), *sadd al-dharāī* (blocking the means), *'urf* (customary law), and other forms of reasoning. With these methodological tools of legal jurisprudence, jurists are able to respond to the situations related to biomedicine.²⁵⁶

3.3 Ņarūra

Another important principle in biomedical matters is the juridical principle of darūra (necessity), which is that pressing needs can even allow what is usually prohibited. According to analogy and by extension, it is based on various verses in the Quran, such as Quran [6:145]: 'Say: "I do not find in the Message revealed to me any meat forbidden to be eaten by one who wished to eat it, unless it be dead meat or blood poured forth or the flesh of swine, for it is impure ... But whoever is forced [by necessity], neither desiring [it] nor transgressing [its limit], then indeed, your Lord is Forgiving and Merciful."' This verse is interpreted as allowing one to act against a prohibition established in Islamic law-here, for instance, the prohibition of pork meat consumption-if one is coerced or forced to save human health or life or for security reasons. Consequently, the forbidden may become permitted on condition that the goal is to overcome a necessity. However, the consequences of applying this criterion must be carefully evaluated to seek an equilibrium with the following hadith: 'God has created for each disease a treatment, but do not use forbidden methods'.257

Once necessity is recognized as the exception to the rule, another principle becomes essential as a guideline, the principle of 'lesser evil'. Amongst the classic applications in Islamic law, we find that it is lawful to abjure Islam in appearance or drink intoxicating liquids to save one's own life or the life of another Muslim. Similarly, the doctor may infringe on the physical integrity of a patient only for a higher therapeutic purpose, to secure the lesser of two evils (e.g., amputation of a limb to save an individual's life). Avoiding evil has priority over the acquisition of good.²⁵⁸

3.4 La ḍarar wa la ḍirār

The principle of *la darar wa la dirār* ('no harm, no harassment') is regarded as one of the most fundamental rules for deducing rulings for social ethics in Islam.²⁵⁹ It serves as a justificatory principle among all jurists for deriving new rulings. The rule of *la darar wa la dirār* expresses the principle that no legislation, promulgation, or execution of any law can lead to direct harm to anyone in society.²⁶⁰

Several other rules are related to this rule, including the principle of *darūra*. In addition, many traditions and verses of the Quran are cited to support its application in legal-ethical decision-making to seek benefits and avert sources of harm or to choose the lesser of two evils. In general, Muslim jurists mention subsidiary rules in various other contexts dealing with interpersonal relations to correlate the establishment of good with the prevention of evil. Moreover, they provide guidelines for situations in which a person has to choose between two evils that appear to be equal and situations in which one of the two equal evils has preponderance for external or internal reasons.²⁶¹

La darar wa la dirār also includes the principle that preventing harm has a priority over promoting good, which can be seen as a principle of proportionality. This principle is a source for the careful analysis of harm and benefit when, for example, a medical procedure prolongs the life of a terminally ill patient without advancing a long-term cure. The principle also allows reasoned choices about appropriate benefits in proportion to costs and risks for the patients and their families. The principle of *la darar wa la dirār* is thus critical in clinical settings where procedural decisions need to be made in consultation with all parties to a case.²⁶²

The Islamic Code of Medical Ethics relates the *la darar wa la dirār* principle specifically to organ donation. According to the Islamic Code of Medical Ethics, 'organ donation shall never be the outcome of compulsion, family embarrassment, social or other pressure, or exploitation of financial need, and donation shall not entail the exposure of the donor to harm'.²⁶³

258	Atighetchi, Islamic Bioethics, 34.
259	Sachedina, Islamic Biomedical Ethics, 67.
260	Sachedina, Islamic Biomedical Ethics, 69.
261	Sachedina, Islamic Biomedical Ethics, 75.
262	Sachedina, Islamic Biomedical Ethics, 75.
263	Islamic Code of Medical Ethics, 10.

3.5 Other Relevant Principles

In biomedical ethics in the Islamic context, the sacred character of the human being is emphasized based on the Quran [17:70]: 'We have honoured the children of Adam.' Life is a divine gift that needs to be protected.²⁶⁴ According to the Islamic Code of Medical and Health Ethics, this divine quality requires that human beings should be kept in full health and well-being. It also requires respect for the human being's personality, private affairs, and secrets, the right to receive all the information relevant to any medical procedure, and the right to make any decision that concerns their health affairs alone.²⁶⁵

However, the freedom of human beings due to their divine quality is not without limits. Humans cannot do as they like with their bodies because, in Muslim belief, everything belongs to God and the body was thus given to the human as a gift in trusteeship. Humans have the duty to respect their bodies and protect them according to the dictates of God expressed in Islamic law. Islamic belief holds that God's law was given to his believers to promote their well-being, harmony, and happiness, according to the Quran [2:185]: 'God intends every facility for you. He does not want to put you to difficulties'.²⁶⁶

Another critical principle is equity. Equity is seen to be an essential value of Islam, one of the purposes of the mission of the Prophet, who is the messenger of God, as expressed in the Quran [57:25]: 'We have sent our messengers with clear signs and sent down with them the Book and the Scale, so that humans may stand in equity'. The importance of equity is expressed in various other Quran verses, such as Quran [16:90] and [7:29]: 'God enjoins equity and charity' and 'My Lord enjoins fairness'.²⁶⁷ According to the Islamic Code of Medical and Health Ethics, equity and equality should be realized in providing health care at the individual, societal, and governmental levels. This means that the greatest possible degree of equality can be achieved in the fair distribution of health resources among members of society and in providing them with preventive and therapeutic care, without discrimination on the basis of gender, race, belief, political affiliation, any social or judicial consideration, or any other factor.²⁶⁸

<sup>Atighetchi, Islamic Bioethics, 35.
Islamic Code of Medical Ethics, 1.
Atighetchi, Islamic Bioethics, 35.
WHO Regional Committee for the Eastern Mediterranean, "EM/RC52/7," 1.</sup>

²⁶⁸ WHO Regional Committee for the Eastern Mediterranean, "EM/RC52/7," 1-2.

4. Organ Transplantation According to Islamic Law

The possibility of transplanting an organ to save a critically ill patient did not exist in the past. Only recently have surgical techniques and immunosuppressive drugs made this an option and, thus, an issue for Muslim jurists. By its very nature, organ transplantation seriously interferes with the physical integrity of the human being.²⁶⁹ The question of whether and under which conditions organ transplantation may be regarded as forbidden or permitted according to the principles and rules of sharia is highly controversial because organ transplants undermine the traditional concepts and definitions of life and death in Islamic jurisprudence.²⁷⁰ The development of organ transplantation has encouraged Muslim jurists to search for legal-ethical justifications to formulate rulings that keep pace with the demand for such medical procedures, which are already a de facto practice in many hospitals in Muslim countries.²⁷¹

Muslim legal scholars consider the principles and rules evident and derivable from the sources of Islamic law and the relevant precedents in the legal literature. The latter occupy a relatively large space in the fatwas on the subject of organ transplantation.²⁷² By drawing upon precedents, legal sources, and diverse legal methods, Muslim jurists use related topics such as ownership of the body, human dignity, and the prohibition of mutilation in Islam to arrive at rulings on organ transplantation.²⁷³ Because Muslim jurists independently interpret the sources to derive of rules, their discussion on organ transplantation falls within the domain of *ijtihād*. This process of individual reasoning is one that every qualified jurist of Islamic law can undertake, with the result that a plurality of opinions exist on the matter of organ transplantation.²⁷⁴

Legal scholars agree that living and dead human beings have an inherent *hurma* (dignity) that protects their bodies against interventions. However, this inviolability can be overridden and organ transplantation is justified if other principles, such as *darūra*, give preference to the goal of saving a life.²⁷⁵

269	Krawietz, <i>Die Ḥurma</i> , 169.
270	Ebrahim Moosa, "Die Nahtstelle Von Naturwissenschaft Und Jurisprudenz," in <i>Moderne Medizin Und Islamische Ethik: Biowissenschaften in Der Muslimischen Rechtstradition</i> , ed. Thomas Eich (Freiburg: Herder, 2008), 172.
271	Sachedina, Islamic Biomedical Ethics, 179.
272	Krawietz, <i>Die Hurma</i> , 169.
273	Mansur Ali and Usman Maravia, "Seven Faces of a Fatwa: Organ Transplantation and Islam," <i>Religions</i> 11, no. 2 (2020): 2.
274	Ebrahim Moosa, "Transacting the Body in the Law: Reading Fatawa on Organ Trans- plantation," <i>Afrika Zamani: Revue annuelle d'histoire Africaine</i> 5-6 (1998): 293.
275	Vrowietz Diellumma 175

275 Krawietz, Die Hurma, 175.

Although some legal scholars still oppose organ transplantation, the majority of legal scholars permit living and dead organ transplantation for its societal benefits. This is the opinion of the Islamic Organisation for Medical Sciences (IOMS) of Kuwait, which arrived at a resolution in its second conference on the topic of the beginning and end of life in Islam in 1985.²⁷⁶ This was followed by a resolution reached by the International Islamic Fiqh Academy (IIFA) of Jeddah in its third conference held in Amman, Jordan in 1986²⁷⁷ and again in 1988 in its fourth session in Jeddah, where death determined through neurological criteria was deemed to be valid death under Islamic law.²⁷⁸ It is also the opinion of eminent Sunni Muslim scholars such as the former rector of Al-Azhar University Sayyid al-Țanțāwī (d. 2010),²⁷⁹ the popular Islamic jurist Yūsuf Al-Qaraḍāwī (d. 2022),²⁸⁰ and the late Shia *marjā*' and former political leader of Iran Ayatollah Khomeini (d. 1989).²⁸¹

Earlier fatwas on organ transplantation focused primarily on individual organs and tissues. The earliest discussions concerned blood transfusion, cornea tissue, and skin grafts. Only in the late 1960s did a general discussion on organ transplantation take place. More recent fatwas on organ transplantation have delved into novel and nonroutine transplants such as womb transplants and mitochondria DNA transplants.²⁸² Despite the diverse foci of these fatwas and discussion, nearly all of them display the same concerns, which are discussed below.

4.1 Deceased Donation

a In General

The earliest debates of Muslim jurisprudence on contemporary medical issues related to the human body arose in the context of autopsies and postmortem examinations. Initially, many Muslim jurists opposed such invasive procedures

276	IOMS cited in International Islamic Fiqh Academy, "Resolution of the International Islamic Fiqh Academy in Its 3rd Session on Brain Death," <i>Majallat al-Majma</i> al-Fiqh <i>al-Islami al-Duwali</i> 3 (1986): 729-32.
277	International Islamic Fiqh Academy (IIFA), "Resolution of the IIFA on Brain Death," 809.
278	International Islamic Fiqh Academy, "Resolution of the International Islamic Fiqh Academy in Its 4th Session Organ Donation," <i>Majallat al-Majma</i> ' <i>al-Fiqh al-Islami</i> <i>al-Duwali</i> 4 (1988): 507-10.
279	Sherine Hamdy, Our Bodies Belong to God: Organ Transplants, Islam, and the Struggle for Human Dignity in Egypt (Berkeley: University of California Press, 2012), 48.
280	Yusuf Al-Qaradawi, Ḥukm Zirāʿat Al-Aʿḍāʿal-Bashariyya: Paper Presented at the Conference at Al-Azhar University, Cairo (2009).
281	Cited in Zahra Takhshid, "Kidney, Money, and the Shī'Ah Implementation of the Rule of Necessity," UCLA Journal of Islamic and Near Eastern Law 19, no. 1 (2021): 91.

282 Ali and Maravia, "Seven Faces of a Fatwa," 3.

on the bodies of the deceased. Interfering with the corpse was seen to be against the dead person's *hurma* and thus reprehensible according to Islamic law. However, initial opposition to this practice gave way to permissiveness as the social benefits of autopsies became more apparent to the affected societies.²⁸³

Similar to the issue of autopsy, deceased organ donation requires some form of post mortem dissection of the body. The traditional justifications presented in precedent rulings in Islamic law cover the cases of post mortem dissection following a stillbirth and the retrieval of swallowed valuable objects belonging to someone other than the deceased. In these cases, classical Islamic law has established that postmortem dissection is permissible. With the possibility of organ donation, the scope of clinical diagnosis requiring some form of post mortem dissection has expanded beyond the traditional justifications.²⁸⁴

Deceased donation is generally a sensitive topic in Muslim states. In the Islamic juridical tradition on death and dying, many rulings deal with the social and psychological implications of death for those left behind: parents, the spouse, children, and other relatives. Muslim funeral traditions enable bereaved relatives to cope with the loss of a loved one. Accordingly, the tradition deals with death at two levels: at the formal level of rituals that must be performed for the dead by the family and the community and at the legal level, where rules outline the rights and duties of the immediate family members toward the dead and to each other. At the ritual level, rulings govern the number of days of mourning to be observed, ceremonies, grave visitations, and the food served to the family of the dead. The ownership of the cadaver is not discussed in the traditional legal literature because this question was irrelevant before the possibility of post mortem procedures. Islamic legal scholars have dealt extensively with the deceased's wasiyya (testament). However, they did not treat the issue beyond the external assets of the deceased and their distribution to the heirs.

Although the sanctity of life and the dignity of human beings are at the centre of the classical rulings on life and death in Islam, any treatment of the status of the human body is conspicuously absent. Without surgical techniques, it was inconceivable to think about donating, harvesting, or banking organs or tissues for future transplants. These questions were simply not treated in classical Islamic rulings.²⁸⁵

²⁸³ Moosa, "Die Nahtstelle von Naturwissenschaft und Jurisprudenz," 172.

²⁸⁴ See Sachedina, Islamic Biomedical Ethics, 174.

²⁸⁵ Sachedina, Islamic Biomedical Ethics, 174-75.

b Arguments Against Deceased Donation

Deceased donation raises two juridical-theological problems: The first is that until the resurrection of bodies on *yawm al-qiyāma* (the day of judgment), Islamic law prescribes the immediate burial of the deceased and prohibits any mutilation of the corpse. Resurrection is one of the fundamental beliefs of Islam. The Quran emphasizes the limited nature of the human sojourn on earth and reminds humanity that life in this world is preparation for the return to the Creator. Death is seen as a stage before the final judgment, when all the dead will be resurrected to render their account of their time on earth. In the Quran, the themes of resurrection and death form the decisive argument for the belief in God's omnipotence and omniscience. Because resurrection is believed to be corporeal, traditionally, the body has to be buried as a whole without any mutilation. It is for the same reason that cremation is not allowed in Islamic law.²⁸⁶

Deceased organ retrieval for transplantation purposes is seen by some Muslim jurists as prohibited in Islam because the procedure represents a mutilation of the corpse, which is forbidden in Islamic law.²⁸⁷ To illustrate this point, the following *hadith* is often cited: 'Breaking the bone of a dead person is like breaking a bone of a living person.' This tradition prescribes that Muslims honour the dead and forbid the desecration of the body.²⁸⁸ Another argument brought forward in the context of prohibiting deceased organ donation is the Islamic belief of the *fiţra* (primordial natural state) enshrined in a sura of the Quran [30:30]: 'This is the natural disposition God instilled in mankind–there is no altering God's creation.'²⁸⁹

The second juridical-theological problem raised by some Muslim jurists is that in Islam, God is considered the sole owner of everything, including the human body, and that human beings merely exercise a sort of trusteeship over the body: a conditional ownership for which they are responsible before God.²⁹⁰ Within this framework, humans have been given *hurma* (dignity). Opponents of deceased donation see organ transplantation as violating human dignity and therefore declare it impermissible. Dignity is understood by Muslim jurists to be expressed in the Quran in various verses in which God dignifies and honours the human being, such as in the Quran [17:70]: 'Verily, we have honoured

286	Sachedina, Islamic Biomedical Ethics, 147.
287	Ebrahim Moosa, "Languages of Change in Islamic Law: Redefining Death in Modernity," <i>Islamic Studies</i> 38, no. 3 (1999): 327.
288	Sachedina, Islamic Biomedical Ethics, 180.
289	Ali and Maravia, "Seven Faces of a Fatwa," 4.
290	Moosa, "Languages of Change in Islamic Law," 327.

the children of Adam.' The *muthla* (mutilation) and *ihāna* (degradation) of a human being's body is seen to be a matter of violating their dignity. Whether living or deceased donation, opponents see organ transplantation as *muthla* and, thus, as a violation of dignity. In addition, the delay of the burial for deceased donation is seen to be a degradation and a violation of dignity.²⁹¹

c Arguments in Favour of Deceased Donation

For some legal scholars, respect for the living person's dignity includes a prohibition against taking organs from a deceased person. This has been the majority opinion among highly regarded scholars in the past. Contemporary scholars, however, find postmortem organ transplantation to be permissible.²⁹²

Some legal scholars who allow organ transplantation find no precedent in Islamic law against organ transplantation. Therefore, the matter is subject to legal discretion, which means that this question can be answered by *ijtihād* (independent reasoning). Their fatwas take the approach that in the absence of a prohibition, the doctrine of *ibāha* ('permission in principle') applies to organ transplantation.²⁹³

Most legal scholars, however, look for principles and precedents in Islamic law and adapt these principles to the issue of organ transplantation by $qiy\bar{a}s$ (analogy). The fundamental principle invoked for the permissibility of organ transplantation is in the Quran [5:32]: 'If anyone saved a life, it would be as if he saved the life of the whole of humanity'. Two *hadīth* argue in the same direction. The first states that 'the faithful in their mutual love and compassion are like the body: if one member complains of an ailment, all other members will rally in response.' The second recalls that 'the faithful are like the bricks of a house that support one another.'²⁹⁴ In Islamic tradition, caring for the ill is also seen to be a *farḍ kifāya* (collective duty).²⁹⁵

Another important principle brought forward in permitting organ donation is the principle of $dar\bar{u}ra$ (necessity), which in general is used to allow prohibited acts in case of severe duress or life-threatening conditions. Another highly relevant principle is that of 'choosing the lesser of two evils to prevent the worse one.'²⁹⁶ While it is commonly accepted that God has the ownership

291	Ali and Maravia, "Seven Faces of a Fatwa," 6.
292	Ahmed R. El-Gindi, "Human Organ Transplantation," in Vroom et al., <i>Looking Beneath the Surface</i> , 204.
293	Krawietz, Die Hurma, 178.
294	Islamic Code of Medical Ethics.
295	Atighetchi, Islamic Bioethics, 161.
296	El-Gindi, "Human Organ Transplantation," 204.

of the body, that human beings only act as stewards, and that the preservation of dignity entails a prompt burial of the intact body, transplantation is seen by legal scholars to be justified when organ donations help to save a life by providing a vital organ such as a heart or lung.²⁹⁷ In 1989, the Mufti al-Shaʿrawi, who was a very popular legal scholar in Egypt from the 1970s to the 1990s and generally opposed to any transplant, nevertheless stated that he was in favour of transplants from a corpse as an extreme solution.²⁹⁸

In the arguments for organ transplantation, great emphasis is placed on the presentation of precedents from the field of surgery on corpses. The principles that follow are then applied analogously to organ transplantation. The precedent that allows the opening of a corpse to retrieve an object of value from the deceased's body is often advanced. Also, the precedent of consuming a corpse is allowed in traditional Islamic jurisprudence to save a life from starvation. In these cases, the point is that the usufruct of human body parts is allowed in emergencies because it is more important to preserve the life of the living than the dignity of the dead. By applying various analogies to procedures that distantly resemble aspects of transplantation, proponents of organ transplantation argue by *argumentum a fortiori* that there is an even better reason to allow organ transplantation.²⁹⁹

The proponents also deal with the opposing side's arguments by taking a stand. The opponents cite the *hadīth* as an argument in support of their position, which states that 'breaking the bones of a dead person is the same as breaking the bones of a living person'. The opponents interpret this *hadīth* as an absolute prohibition of organ transplantation because it can mutilate the corpse. However, the proponents interpret this *hadīth* differently. They explain that the meaning of this *hadīth* is to emphasize the dignity of the corpse and that the statement was not made in anticipation of organ transplantation and thus does not argue against it. They cite the circumstances in which the Prophet made this statement. The Prophet had said this as a rebuke directed at a grave-digger who tried to squeeze a corpse into a grave that was too narrow by breaking its bones. The context shows that the *hadīth* rejects such undignified treatment of the dead. Therefore, this cannot be applied to the case of organ transplantation because organ transplantation is not about violating the dignity of the dead.³⁰⁰

297	Sachedina, Islamic Biomedical Ethics, 176.
298	Cited in Rispler-Chaim, Islamic Medical Ethics, 33.
299	Moosa, "Die Nahtstelle von Naturwissenschaft und Jurisprudenz," 182; Krawietz, Die

Ḥurma, 187.

³⁰⁰ Moosa, "Die Nahtstelle von Naturwissenschaft und Jurisprudenz," 180-81.

4.2 Living Donation

a In General

The Muslim legal scholars who allow organ donation invoke sources of Islamic law and precedent cases in the search for principles that can then be applied by analogical reasoning to organ transplantation. In general, the same principles apply to living donation as to deceased donation. Opponents of living organ transplantation raise the issue of *hurma* as a prohibiting factor. Proponents emphasize that such an intervention can be justified if it saves a human life.

b Arguments Against Living Transplantation

Certain legal scholars think that there is an absolute ban on organ transplantation. Working from Quran [17:70] ('Verily, we have honoured the children of Adam'), they emphasize dignity of the human being. Furthermore, the Quran verses [95:5] and [82:6] are cited to prove that man, as God created him, has a perfect form, with the consequence of an explicit prohibition of any contempt or disrespect.³⁰¹ Another argument against organ transplantation is found in the legal maxim that the 'avoidance of harm has priority over the attainment of possible benefits.' Organ transplantation is then seen to be an intervention in the body that harms the living person.³⁰² Another legal maxim that is cited when it is difficult to weigh the pros and cons is the preference for abstention: 'When the evidence of a prohibition conflicts with the evidence of permissibility, preference is given to the prohibition'. Because no evidence of permission for organ transplantation can be found in the traditional legal jurisprudence, this maxim is used by some legal scholars to declare organ transplantation prohibited by Islamic law.³⁰³

Another argument which is brought forward in the case of deceased donation refers to *muthla* (mutilation) of the body. The cutting of organs from the body of a human being harms a divinely created body, which is prohibited in Islamic law. The body is not to be harmed.³⁰⁴ Another argument that is specifically invoked for living donation is based on Quran [2:195], in which God invites human beings not to destroy themselves with their own hands. This sura is commonly interpreted as a prohibition of suicide, but the same sura is interpreted to include the self-destruction of one's organs through organ trans-

301	Krawietz, Die Hurma, 177.
302	Moosa, "Die Nahtstelle von Naturwissenschaft und Jurisprudenz," 176-77.
303	Motafa Salem, "The Islamic Legal System Vis-À-Vis Euthanasia and Organ Transplan- tation," in Vroom et al., <i>Looking Beneath the Surface</i> , 275.
001	

304 Salem, "The Islamic Legal System," 274.

plantation.³⁰⁵ Based on the violation of human dignity, the obligation to avoid harm, and the prohibition of self-destruction or self-injury, organ transplantation is declared to be prohibited by *argumentum a fortiori*.³⁰⁶

c Arguments in Favour of Living Transplantation

As in the case of post mortem organ transplantation, the fundamental principle that is invoked to allow living organ transplantation is Quran sura [5:32]: 'If anyone saved a life, it would be as if he saved the life of the whole of humanity'.³⁰⁷ Proponents of living organ transplantation interpret this sura as confirming that an individual has the right to decide over their own body when doing a good deed, and that it is no violation of Islamic law when a person donates an organ to save a life. Other principles invoked are the principles of 'necessity' and of 'lesser evil' as in the case of deceased organ transplantation.³⁰⁸

Proponents of living organ transplantation permit the procedure on condition that the living person is not harmed more than necessary in the surgical procedure and the procedure does not endanger the living person's life. If organ transplantation led to the death of the living donor, as in the case of heart transplantation or both lungs, a transplant would be absolutely forbidden because this would be suicide, which is prohibited in Islamic law.³⁰⁹ Therefore, Islamic jurists distinguish between vital and inconsequential organs. Vital organs are defined as essential to the survival of a human being. Sometimes the term vital is extended to include aesthetic considerations such as maintaining one's appearance. In Islamic law, inflicting any physical deformation is prohibited.³¹⁰

4.3 Death Criteria

a In General

The equation of death with biological death has led to many discussions in both Europe and the Islamic world. In classical Islamic law, the determination of death was not a problematic issue. Islamic jurists relied on the opinions of medical experts who applied the traditional criteria of death: cessation of respiration and blood circulation. Muslim jurists saw complete cardiac arrest as a sufficient criterion to declare a person legally dead. The problem arose when

306 Moosa, "Die Nahtstelle von Naturwissenschaft und Jurisprudenz," 179.

307 Atighetchi, Islamic Bioethics, 161.

308 El-Gindi, "Human Organ Transplantation," 205. See chapter IV.4.1c

309 Krawietz, Die Ḥurma, 191; Islamic Code of Medical Ethics.

³⁰⁵ Atighetchi, Islamic Bioethics, 163.

³¹⁰ Sachedina, Islamic Biomedical Ethics, 188.

modern medical technology created the possibility of maintaining signs of life in a patient who is brain dead. Soon the question had to be clarified whether it is permissible to remove organs from the body of a brain-dead person, even if the circulatory functions are still running, most of the time maintained artificially with machines.³¹¹

It is widely accepted in the medical sciences today that the brain acts as the coordinating and unifying centre of the human body and that the total and irreversible destruction of the brain marks the death of a human being. Initially, Muslim jurists remained faithful to the traditional criteria of death. Since then, brain death has been accepted as a form of death by the majority of Islamic jurists.³¹² The Islamic Organization of Medical Science (IOMS) recognized brain death as a form of death for the first time in 1985. A year later, and again in 1988, the International Islamic Figh Academy (IIFA) confirmed this opinion in their declarations.³¹³ In 1996, the Islamic Organization for Medical Sciences (IOMS) in Kuwait reaffirmed the statements of 1985. It specified signs that could establish a medical declaration of death. Signs of death include (a) complete irreversible cessation of respiratory and cardiovascular systems and (b) complete irreversible cessation of the functions of the brain, including the brainstem.³¹⁴ For Shia Islam, Ayatollah Khomeini, the former political and religious leader of Iran, approved the idea of organ transplantation not only from living donors but also from brain-dead patients.315

b Death According to Islamic Tradition

Islamic law has established rules on funeral rituals and testaments. To be able to follow these rules, it has always been important in Islamic law to know what death is and at what time death occurs. In traditional Muslim understanding, the decisive defining feature of death is the moment when the *nafs* (soul) departs from the body. The concept of the soul is established within Muslim cosmology. In Islamic cosmology, human life is an interaction between an ephemeral physical substance and an eternal spiritual entity that departs it at the time of death.

- 311 Kellner, Islamische Rechtsmeinungen, 129.
- 312 Atighetchi, Islamic Bioethics, 175; Sachedina, Islamic Biomedical Ethics, 161, 163.
- 313 Abul F. M. Ebrahim, "Islamic Jurisprudence and the End of Human Life," *Medicine and Law* 17, no. 2 (1998): 192; El-Gindi, "Human Organ Transplantation," 190–191.

³¹⁴ Islamic Organization for Medical Sciences, "Statement of the Islamic Organization for Medical Sciences About the Medical Definition of Death," accessed December 22, 2022, http://www.islamset.net/bioethics/death/index.html; Mohammed A. Al-Bar and Hassan Chamsi-Pasha, "Brain Death," in *Contemporary Bioethics*, ed. Mohammed A. Al-Bar and Hassan Chamsi-Pasha (Cham: Springer, 2015), 233ff.

³¹⁵ S. M. Akrami et al., "Brain Death: Recent Ethical and Religious Considerations in Iran," Transplantation Proceedings 36, no. 10 (2004): 2884.

The Quran uses the crucial term *nafs* many times. Islamic literature describes *nafs* as the entity that infuses the human body with life. When this entity departs, the body ceases to exist as a part of an integrated person.³¹⁶ According to traditional Islamic understanding, the kernel of human existence is its spiritual substance or divine element, and the human body is simply an instrument that serves this spiritual substance. In this sense, the spirit or soul does not reside in matter; instead, it is created by God as a source of life and is linked to the body. The spirit or soul manages the body – it is the body's master.³¹⁷

Since the soul is not visible, jurists of Islamic law have adopted a list of physiological features to indicate the separation of the soul from the body.³¹⁸ The responsibility for identifying these signs is left with medical professionals. In traditional Islamic understanding, the signs included relaxation of the feet and arms, pinching of the nose, the pallor of the temples, and the loss of suppleness of the skin on the face, and when the heart stopped beating and breathing stopped, it was taken as an indication that the soul had left the body.³¹⁹ According to theological opinion, it is essential that these signs are based on human experience and not on religious texts. These signs reflect the medical knowledge available before the advent of modern medicine. Theologically, these signs have no absolute validity for determining the death that has occurred.³²⁰

c Arguments Against Accepting Brain Death

Not all Islamic jurists accept the notion of brain death. Opponents argue that life ends when the soul leaves the body. Since the soul is invisible, one must rely on external signs that indicate natural death. In addition, opponents of the brain death concept apply the principle *al-yaqīn la yazūl bi shakk* ('certainty is not removed by doubt'). This means that as long as the heart beats, albeit thanks to technical aids, and cell movement and growth and various reflexes are present, there is at least some possibility that the person could still be alive. Some Muslim scholars also argue that brain death is a significant sign of death that should not be disregarded but is insufficient to conclude that a person is dead. They posit that only the traditional signs remove the last trace of doubt.³²¹

³¹⁶ Sachedina, Islamic Biomedical Ethics, 148.
317 With reference to Al-Ghazali in Sachedina, Islamic Biomedical Ethics, 150.
318 Moosa, "Languages of Change in Islamic Law," 316.
319 Atighetchi, Islamic Bioethics, 175.
320 Kellner, Islamische Rechtsmeinungen, 130.

³²¹ Kellner, Islamische Rechtsmeinungen, 135-36.

It is further argued that protecting human life is a fundamental legal right and a legal-religious necessity. In Islam, killing human life is a grave sin and is forbidden. Therefore, haste in pronouncing death is extremely dangerous.³²²

d Arguments in Favour of Accepting Brain Death

The main argument for the acceptance of brain death as a form of death is found in the view that life is over when the body is no longer capable of serving and responding to the nafs (soul). In the case of brain death, this is taken as a given. Scholars who hold this view base it on the fact that in the Islamic tradition, the soul is considered an entity created by God, which God brings into the human body and enables it to have a sensory perception, cognitive intelligence, and emotional stirring. The soul is responsible for all volitional, conscious activities a human performs, but it is not responsible for bodily reflexes or autonomously controlled bodily movements. Thus, the body's ability to respond to the soul characterises the connection between body and soul. The human being is considered dead when the soul can no longer control the body. Proponents of brain death find that medicine has now proven that all these functions described as the soul's task in the Islamic tradition (sensory perception, emotional perception, cognitive ability, and conscious control of the body) are connected to the brain. They interpret the brain to be the centre that connects the body with the soul. Therefore, the death of the brain is the point at which human life ends, and thus brain death corresponds to the concept of death under Islamic law,³²³

Another opinion in favour departs from the fact that death is not determined by any textual ordinance in the religious-legal sources and that the issue is, therefore, not regulated by any definitive norm, which invites the scholars to exercise *ijthād* (independent reasoning) in order to interpret the sources independently. Some scholars then conclude that medical specialists' observations and research findings prevail in matters not regulated by textual ordinance. Furthermore, it is assumed that the diagnosis of death is always dependent on the human experience. Therefore it is appropriate, even from a religious point of view, to apply the criteria that correspond to the current state of science: the medical experts are the final authority on this issue. Based on the fact that the signs of death set out in Islamic law are based on experience and not on religious texts, the medical redefinition of the time of death should be adopted in religious law.³²⁴ Muslim scholar Țanțāwi argued that determining

³²² Kellner, Islamische Rechtsmeinungen, 136.

³²³ Kellner, Islamische Rechtsmeinungen, 131-32.

³²⁴ Kellner, Islamische Rechtsmeinungen, 133.

the onset of death falls outside of the jurisdiction of Islamic scholars and that physicians have full authority over this matter.³²⁵

Another opinion in favour takes recourse to analogy to establish a precedent resembling the case at hand. The precedent is found in criminal law where occasions arise when the cause of death has to be established. There, different phases of death have been established. The cessation of the spontaneous function of the senses indicates the 'phase of death'. It has also been established that the evidence must suffice to constitute knowledge satisfying the 'dominant probability' of rectitude, not absolute certainty. In this context, it is remembered that death has always been assumed by legal scholars. The assumption was based on their knowledge and understanding that the soul had departed from the body. If the body did not respond to the sensory and volitional activity test, they knew the soul had departed. This logic is analogically applied to the case of brain death. Since the brain-dead person does not respond to the test of sensory and volitional activity, it is determined that the soul has already departed. Proponents of deceased organ transplantation propose that a braindead person is declared as having the legal status of a deceased; therefore, their organs can be used for organ transplantation.326

4.4 Other Selected Issues

a Consent

In the case of living organ donation, Muslim scholars are of the opinion that organs can not be transplanted unless the donor has given consent.³²⁷ The consent requirement in living donation is uncontested. The same applies to post mortem organ transplantation: An organ can be transplanted from a deceased person on the condition that the person authorised it during their lifetime or, at least, has not indicated any fundamental objection to organ donation. In Islamic law, will and intent are central to human activity. Any religious duty one performs which is not accompanied by *niyya* (inner intention) is not considered fulfilled.³²⁸ Regarding organ donation, this principle leads to the rule that without intent or will, a person cannot donate an organ.³²⁹

325	See Țanțāwi cited in Hamdy, Our Bodies Belong to God, 48.
326	Moosa, "Languages of Change in Islamic Law," 317-19.
327	Sahin Aksoy, "A Critical Approach to the Current Understanding of Islamic Scholars on Using Cadaver Organs Without Prior Permission," <i>Bioethics</i> 15, 5/6 (2001): 467; Atighetchi, <i>Islamic Bioethics</i> , 172.
328	Vardit Rispler-Chaim and Anne-Marie Duguet, "Debates in Islamic Bioethics on How to Increase Organ Donations: Between Presumed Consent and Explicit Consent,"
	Ethics, Medicine and Public Health 7 (2018): 92.

³²⁹ Krawietz, Die Hurma, 195.

For post mortem donation, legal scholars believe that a person has the right to make a testamentary disposition about organ removal after death before passing away. In the literature, it is discussed whether the consent of the relatives can replace the lack of consent and whether the state may dispose of the operation even without the declared will of the organ donor. Most scholars tend to believe that the disposal of this right falls to the heirs upon death.³³⁰

Some scholars argue to re-examine the absolute requirement of obtaining prior consent from the deceased or consent from the relatives since a strict application of this requirement would appear to contradict the maxim of $dar\bar{u}ra$ (necessity) according to which necessities render the prohibited permitted. In this case, the necessity is saving the organ receiver's life. In addition, proponents of organ donation argue that if an available organ were not to be transplanted because of lack of consent, the obligation of *fard kifāya*, the collective duty to donate, would be neglected. In this situation, a minority opines that the medical staff in charge of the transplant procedure represent the community as a whole. Once an organ for transplant has been obtained, the community regards itself as exempt from seeking a different cure for the recipient of the organ.³³¹

This opinion has, however, been criticised for disrespecting the autonomy of the patient and giving way for medical paternalism in the doctor-patientrelationship.³³² In addition, this opinion is not socially accepted, which can be illustrated with the debate on whether presumed consent is acceptable for the organ transplantation of deceased. Usually, when a state has implemented a presumed consent model (in contrast to explicit consent), a person who refuses to donate his or her organs after death is obliged to opt-out during lifetime. This means one must formally sign a refusal to donate organs while still alive. The presumed consent model meets strong opposition in the Muslim world. One common reason for this strong opposition is the strong family bonds in Islamic culture. In Muslim societies, the family often has a decisive role in the decisionmaking process on the health of one of its members and not the state. The role of the family is, however, also detrimental to the respect of the deceased's will. In the legal literature of Islamic jurists, it is not clear whether the family can override the deceased's explicit in regards to post-mortem donation.³³³

³³⁰ Krawietz, Die Hurma, 195; Atighetchi, Islamic Bioethics, 172.

³³¹ Aksoy, "A Critical Approach," 471.

³³² Atighetchi, Islamic Bioethics, 47; Sachedina, Islamic Biomedical Ethics, 28.

³³³ Atighetchi, Islamic Bioethics, 173.

b Monetary Advantage

The sale of transplants is generally considered to be illegal. According to classic Islamic law, the sale of the (free) human being or a part of him is void due to the human being's inherent dignity (*hurma*) laid down in the Quran. Therefore, the human body cannot be treated as a commodity that can be turned for commercial or other advantages.³³⁴ Consequently, Muslim jurists have ruled that a human being, whether alive or dead, cannot be an object of a commercial transaction.³³⁵

Compensating the donor financially to express gratitude and not as a counter value is widely accepted. Some legal scholars even go so far and declare a monetary advantage to be permissible based on the notion of limited ownership of a human being over their body. They argue that receiving money for an organ removed for the recipient's benefit should be legitimate, following the logic of Islamic criminal law: Since sharia tort law requires (diyya) monetary compensation when a part of the body is injured, organ donation should also be compensated.³³⁶ In addition, it is argued that when applying the principle of darūra (necessity) to organ transplantation, organ donation is permitted by rendering something that is forbidden licit. Therefore, for the preservation of the health and well-being of the two parties involved in an organ donation, there should be no reference to other aspects. Any considerations regarding other social or religious distinctions are neglected when assessing the permissibility of organ transplantation, including the issue of monetary exchange between the two parties. This would mean that for some legal scholars, the sale of human organs appears to present no problem from a legal point of view as long as there is no harm to the person who does so.337

V. Conclusion

The WHO Guiding Principles on Human Organ Transplantation is the prevalent legal instrument for the representation of general bioethical principles applied to the issue of organ transplantation. The document's aim has been harmonising global practices in the procurement, processing and transplantation of human organs by providing a guideline for the states for legislation.

336 Sachedina, Islamic Biomedical Ethics, 186.

³³⁴ Krawietz, Die Hurma, 200.

³³⁵ Sachedina, Islamic Biomedical Ethics, 187.

³³⁷ Sachedina, Islamic Biomedical Ethics, 185.

Muslim legal scholars have also assessed organ transplantation based on Islamic jurisprudence. The evaluation of the fatwas shows that, in the meantime, a majority opinion has been established, allowing both living and deceased donations. The focus of the fatwas is generally on the question of permissibility of living or deceased organ donation. The requirements for organ transplantation are saving another person and preserving the donor's life and health. In contrast, other aspects of organ transplantation, such as free and informed consent or allocation of organs, seem to be treated as secondary since the assessments in the fatwas are not consolidated. It remains unclear what the Islamic legal principles and reasonings are regarding aspects that go beyond the question of permissibility. An indicator of lacking profound reasoning based on Islamic legal jurisprudence can be seen in consent requirements when the deceased has not expressed an explicit will during their lifetime. The answer from an Islamic point of view is that the consent of the deceased's next of kin needs to be obtained. However, it is not clear whether the next of kin must act according to the deceased's presumed will. It is conceivable that Islamic legal scholars have left the answering to these questions to other sources, such as the general bioethical principles.

Organ Transplantation Laws in MENA States

I. Introduction

This chapter evaluates the compatibility of the national organ transplantation laws of the Muslim-majority states in the MENA region with the principles established in the *WHO Guiding Principles on Human Organ Transplantation* and the legal-ethical principles established by Muslim jurists in their fatwas. Each state is analysed separately. For each state, general information on the practice of organ transplantation is followed by the legislative history of organ transplantation regulations and the governing regulation. Lastly, each state's regulation is compared with the *WHO Guiding Principles* and Islamic legal rulings on organ transplantation.

The assessment focuses on the permissibility and requirements of living and deceased transplantation, consent in living and deceased transplantation, and commercial transplantation and allocation. The majority opinion of Islamic legal scholars expressed in fatwas permits organ transplantation if necessary to save another person's life and prohibits organ transplantation if it endangers the life or the well-being of the donor. Deceased donation and the concept of brain death are accepted by most Islamic legal scholars. The consent of the living donor and of the deceased donor during lifetime expressed in a testament is also seen to be a requirement. Most Islamic legal scholars also consider commercial transplantation to be prohibited.³³⁸ The *WHO Guiding Principles* establish as ethical cornerstones the informed consent of the living donor, the preference for a genetic, legal or emotional relationship between the living organ recipient and the donor, permission for deceased donation on condition that any consent required by law is obtained and there is no reason to believe that the deceased person objected to such donation. Furthermore, the *WHO Guiding Principles* require the allocation of organs to be guided primarily by clinical criteria and ethical norms, and they ban commercial transplantation.³³⁹

II. Gulf States and Arabian Peninsula

1. Saudi Arabia

1.1 In General

In the early 1970s, organ transplantation in Saudi Arabia was limited to renal transplantation, and most Saudi patients with renal failure needed to travel abroad, usually to the US or Europe, to receive treatment. The situation changed in 1979 when an organ transplantation programme was introduced in Riyadh, and a visiting UK team performed the first successful kidney transplant from a living donor. From the early 1980s onwards, kidney transplants using living related donors and imported kidneys from the Eurotransplant Foundation became increasingly common. During this period, essential organ procurement logistics and coordination were introduced.³⁴⁰ This pioneering role of Saudi Arabia in the Gulf region has made the country a popular destination for patients from neighbouring countries seeking treatment.³⁴¹

Saudi Arabia was one of the first countries in the Arabian Peninsula to regulate organ transplantation. In 1978, the Saudi Council of Senior Ulama issued an official fatwa that approved corneal transplantation.³⁴² In 1982, this Council issued a fatwa permitting organ transplantation from both living and deceased

338	See Chapter 'Organ Transplantation', 73IV.4
339	See Chapter 'Organ Transplantation', III.3.2
340	Najd S. Al-Sulaiman et al., "Organ Transplantation in Arabian Gulf Countries: Ethical and Legal Practice and Beyond," <i>Forensic Science, Medicine, and Pathology</i> 17, no. 4 (2021): 671.
341	Eveline Schneider Kayasseh, "Organ Transplantation in the United Arab Emirates: Legal, Ethical and Historical Aspects," <i>Electronic Journal of Islamic and Middle Eastern</i> <i>Law (EJIMEL)</i> , no. 2 (2014): 13.
242	Decision No. 66 of 1208 U. (1078). Senior Ulama Commission of Saudi Arabia

donors.³⁴³ In line with these precedent-setting legal opinions, in 1984, the first two kidney transplants in Saudi Arabia were performed from a deceased local donor who was declared brain dead by the brain-stem criterion.³⁴⁴ Following this, the National Kidney Foundation (NKF) was established in 1985. Its main goal was the implementation and coordination of a local deceased organ transplant programme.³⁴⁵

In 1986, cardiac transplantation was introduced in Saudi Arabia, followed by liver and pancreas transplantation in 1990 and lung transplantation in 1991. To adapt to these changes, the NKF was renamed as the Saudi Center for Organ Transplantation (SCOT) in 1993.³⁴⁶ The law that regulates organ transplantation in Saudi Arabia is the Directory of the Regulations of Organ Transplantation. This was laid down by the SCOT and endorsed by the state through Ministerial Resolution Nr. 1081/1/29 of 1414 AH (1993 AD).³⁴⁷ The SCOT is the main centre for supervising and regulating organ donation and transplantation in Saudi Arabia; it provides coordinators, procures teams, and ensures consent. It also has a significant role in increasing public awareness of organ donation in schools and hospitals.³⁴⁸ To prevent trade in organs, the SCOT coordinates financial compensation for the donor, which includes the reimbursement of loss of earnings.³⁴⁹

Subsequently, several scientific committees were established to deal with various aspects of organ transplantation. They were tasked with preparing regulations that allow organ donation from both related living donors and braindead donors and corpses and outlining the diagnosis, confirmation, and management of brain death.³⁵⁰ Organ donation from living unrelated donors was recognized in 2007 when the Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors were developed and released.³⁵¹

343	Decision No. 99 of 1402 H. (1982), Senior Ulama Commission of Saudi Arabia.
344	Atighetchi, Islamic Bioethics, 176.
345	F. A. Shaheen, M. Z. Souqiyyeh, and A. R. Al-Swailem, "Saudi Center for Organ Trans- plantation: Activities and Achievements," <i>Saudi Journal of Kidney Diseases and Trans-</i> <i>plantation</i> 6, no. 1 (1995): 41.
346	Shaheen, Souqiyyeh and Al-Swailem, "Saudi Center for Organ Transplantation," 42.
347	Directory of the Regulations of Organ Transplantation in the Kingdom of Saudi Arabia of 1414 H., Saudi Arabia.
348	Al-Sulaiman et al., "Organ Transplantation in Arabian Gulf Countries," 671.
349	Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors of 2007, Saudi Arabia.
350	F. A. Shaheen, "Organ Transplantation in the Kingdom of Saudi Arabia: New Strategies," Saudi Journal of Kidney Diseases and Transplantation 5, no. 1 (1994): 4.

351 Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors of 2007.

Today, almost all types of transplantations, including kidney, liver, heart, pancreas, lungs, corneas, bone marrow, and cardiac valves, are performed in Saudi Arabia, which remains the regional leader in organ transplantation.³⁵² According to the most recent data published by the International Registry in Organ Donation and Transplantation, from 2021, the deceased donor rate is 2.9 per million population (pmp), and the living donor rate is 37.10 pmp, slightly less than Turkey, South Korea, and Israel. Saudi Arabia's population is around 35 million. In the African and Mediterranean Regions, Saudi Arabia has the highest living donor rate from a total of 14 countries.³⁵³

1.2 Regulations

of 2007.

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The documents regulating organ transplantation in Saudi Arabia are the Directory of the Regulations of Organ Transplantation laid down by the SCOT which the state has endorsed through Ministerial Resolution Nr. 1081/1/29 in 1993 (hereafter called the Directory). Its endorsement was made possible by prior approval through the Senior Ulama Commission Decision No. 99 of 1978. In this Decision, the board found that the removal of an organ is permitted if the need arises, there is no risk in the removal, and the transplant seems likely to succeed. The removal of an organ from a dead person is permitted should the need arise, should the removal cause no dissatisfaction, and should the transplantation seem likely to succeed. The Senior Ulama Commission Decision is attached to the Directory of Regulations in an appendix.³⁵⁴ The other relevant document is the Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors (hereafter called the Regulations Procedures) of 2007.³⁵⁵

The Directory outlines the technical and administrative aspects concerning organ transplantation, scientific definition of brain death, conditions, and method of organ retrieval, transferring retrieved organs, distribution of hospitals to the transplant centres, distribution of the retrieved organs, criteria to be met with for opening new transplant centres both government and private, and post-transplant follow-up of patients for various centres. The technical and administrative aspects of organ transplantation are regulated in detail.

Provision no. 4 of the chapter titled 'General Regulations' in the Directory allows deceased donation by prescribing that consent must have been ex-

352	International Registry in Organ Donation and Transplantation, "Saudi Arabia".		
353	International Registry in Organ Donation and Transplantation, "Final Numbers 2021,"		
	4, 7, 9.		
354	Directory of the Regulations of Organ Transplantation in the Kingdom of Saudi Arabia of		
	1414 H.		
355	Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors		

pressed during lifetime in a will attested by a court. If the deceased has not left a will expressing their will to donate, the deceased's inheritors' written consent is required. A specialized organization's consent must be obtained before organ removal if the deceased is unidentified. Provision no. 3 in the 'General Regulations' requires brain death to be documented by a brain death committee comprising a physician, an administrative director, and a brain death co-ordinator (Provision no. 2.a. 'General Regulations').

For living related donation, Provision no. 8 in the 'General Regulations' requires the existence of a blood relationship between the donor and recipient until the second degree, or the donor should be the wet-nurse or the wet-nurse's children or spouse. The restriction of living donations to related recipients was later changed (see below).

The Directory further requires in Provision no. 8 that the donor should be in good health and that the organ donation should not harm the donor or recipient. The Directory also prohibits transplantation of single organs on which the donor's life depends. The Directory requires free and informed consent for living donation: organ donation should be accepted by the donor without any social or financial pressure; written consent should be given; the donor should have the right to change his mind at any time before surgery; and the donor should be informed about all possible and probable dangers resulting from organ removal. The Directory also requires living donors to be at least 18 (Provision no. 4 'Criteria for Living Related Donation').

The living unrelated donation was recognized much later in 2007 in the Regulations Procedures. The SCOT supervises organ donation from living unrelated donors according to these regulations. Written consent is required, according to Provision no. 3 of the Regulations and Procedures, after an interview by an evaluation committee. The living donor must receive information about the results, and consequences of the process. Organ transplantation is permitted after receiving the donor's consent, after satisfying medical and psychological assessments and after the approval by the SCOT (Provision no. 5 of the Regulations and Procedures). Provision no. 12 regulates a charity association that guarantees the donor's health check-up for life and coordinates compensation for the donor for absence from work and pain caused by surgery. The Regulation and Procedures do not explicitly prohibit the sale and purchase of organs. However, the Directory of Regulations states that it applies the best practice ethics of living organ transplantation to ensure informed consent, donor autonomy, and donor selection derived from international consensus as set out by, for instance, the WHO Guiding Principles for Organ and Tissue Transplantation and that the aim of these regulations and procedures is to prevent the practice of commercial transplantation.

The Directory of Regulations regulates criteria for organ allocation for each organ and in detail. The criteria follow standard medical-technical allocation criteria.

1.3 Assessment

When comparing the regulations to the Decision by Senior Ulama on organ transplantation, it is interesting that the regulations do not reproduce the wording of the decision, such as that organ transplantation is permitted if the need arises, there is no risk to the removal, and the transplant seems likely to be successful. The reason for this omission might lie in the detailed and medical-technical nature of the Saudi regulations, which presume that organ transplantation is only conducted if it is safe and necessary.

Generally, the regulations follow the basic principles of organ transplantation set up by the international community and represented in the *WHO Guiding Principles*.³⁵⁶ The Regulations and Procedures for Organ Donation from Living Genetically Unrelated Donors state that the regulations are based on the *WHO Guiding Principles*. The Saudi regulations have also incorporated many of the Principles, such as accepting live donations only with the donor's informed and voluntary consent, ensuring the professional care and followup of donors, and proper monitoring of selection criteria (Principle 3). In line with Principle 3, the Saudi regulations also require that consent be freely given without undue influence or coercion.

As in Principle 4, the Saudi regulations also ensure that minors are not eligible for living donations. Furthermore, the sale and purchase are, although not explicitly prohibited, not allowed, thus fulfilling Principle 5 of the *WHO Guiding Principles*. The Saudi regulations also follow Principle 9, which requires that the allocation be guided by clinical criteria and externally justified and transparent. The Directory has set up detailed requirements for organ allocation.

Saudi regulations governing consent for deceased donation in general fulfil the requirements of Principle 1. Saudi regulations require consent from the deceased during their lifetime. If no consent was expressed, the next of kin must give consent. According to Principle 1, the state's regulations should ensure that there is no reason to believe that the deceased person objected to organ removal. However, the Saudi regulation does not ensure this requirement. The next of kin are not held to act by the presumed will of the deceased.

2. Kuwait

2.1 In General

Kuwait initiated its transplantation programmes in 1979 with the first living related kidney transplant.³⁵⁷ Many kidney failure patients went abroad to buy kidneys before the transplantation programme started. To stop this practice, kidneys had to be made available in Kuwait.³⁵⁸ The leading organ transplant centre in Kuwait, the Hamid Al-Essa Organ Transplant Center, was established in 1986.³⁵⁹ A year later, the Decree Law No. 55 on Organ Transplantation Legislation was issued by the Kuwaiti government.³⁶⁰ From 1979 to 1990, a total of 500 kidney transplants were performed in Kuwait. The Iraqi invasion in 1991 caused a hiatus in transplant activities, which resumed in September 1993.³⁶¹ In 1999, the living unrelated donor programme was started because the number of kidney donations remained low. In this programme, an official committee decides to accept an unrelated living donor after a psychological assessment of the donor. The aim is to exclude cases of coercion and apparent exchange of money.³⁶²

Deceased-donor programmes were established in 1996.³⁶³ The deceased-donor programme mainly involved kidney transplants. Another organ that was transplanted early was the pancreas. The first deceased pancreas transplant was performed in 1987.³⁶⁴ The first liver transplant from a deceased donor was conducted in 2018, and the first heart transplant was performed in 2019.³⁶⁵ A committee for multiorgan transplantation was established in 2015. This committee has met on several occasions and passed significant recommendations emphasizing the necessity of deceased-donor liver and heart transplants in the country.³⁶⁶ Before the start of a deceased liver, pancreas, and heart transplantation programme, Kuwaiti patients were placed on waiting lists in Saudi Arabia and were primarily transplanted with organs from deceased Kuwaiti donors. In return, deceased-donor organs have been offered to Saudi

357	Abdulla A. Al Sayyari, "The History of Renal Transplantation in the Arab World: A View from Saudi Arabia," <i>American Journal of Kidney Diseases</i> 51, no. 6 (2008): 1034.
358	WHO, "Report on the Regional Consultation on Cell, Tissue and Organ Transplantation (WHO-EM/LAB/370/E)".
359	Al-Sulaiman et al., "Organ Transplantation in Arabian Gulf Countries," 671.
360	Decree on Law No. 55 of 1987 on Organ Transplantation, Kuwait.
361	Al Sayyari, "History of Renal Transplantation in the Arab World," 1043.
362	WHO, "WHO-EM/LAB/370/E," 9.
363	Al-Sulaiman et al., "Organ Transplantation in Arabian Gulf Countries," 671.
364	Al Sayyari, "History of Renal Transplantation in the Arab World," 1042.
265	International Degistry in Organ Donation and Transplantation "Kuwait"

- 365 International Registry in Organ Donation and Transplantation, "Kuwait".
- 366 Mohammad Jamal et al., "Organ Transplantation in Kuwait and the Recent Initiation of a Liver Program," *Transplantation* 105, no. 10 (2021): 2125.

centres. Kuwaiti patients requiring organ transplants also travel abroad to the United States or the United Kingdom with expenses fully covered by the Kuwaiti Government while waiting for some time on US or British transplant lists.³⁶⁷

Countries with small populations such as Kuwait face challenges establishing complex organ transplant programmes. Liver and heart transplants require a skilled surgeon and expert anaesthetist, a perfusionist, intensive care, hepatology, interventional radiology, interventional gastroenterology, pharmacy, immunologists, an infectious disease specialist, and expert nursing care. Such an extensive setup is difficult to attain and maintain without a large volume of cases.³⁶⁸

The population of Kuwait is around four million. The number of organ donations is relatively high. The living donor rate in 2021 was 11.2 pmp, and the deceased-donor rate was 5.8 pmp.³⁶⁹ In the African and Mediterranean region, Kuwait has the fifth highest rate for living organ donation from a total of 14 countries and the second highest rate for deceased donation from a total of six countries in 2021.³⁷⁰ The data provided by the International Registry in Organ Donation and Transplantation show that transplantation activity has been continuous and has included deceased organ transplantation.³⁷¹

2.2 Regulations

In 1987, the Kuwaiti government issued Decree-Law No. 55 on Organ Transplantation.³⁷² According to this law, organ retrieval is allowed from living and deceased individuals to maintain the life of another person in need of an organ (Art. 1). Organ donors must be fully competent and have signed written consent in the presence of two witnesses (Art. 2), which they may withdraw at any time (Art. 4). Consent given from a living person to retrieve an organ for organ transplantation is not valid if it causes the death or severely violates the well-being of the donor (Art. 3). After a medical examination, the donor must be informed of the health consequences of donation in writing (Art. 4). Deceased individuals must also have given their written consent to donation in the presence of two witnesses during their lifetimes (Art. 2).

The Kuwaiti Law allows organ removal from a deceased person who has not personally expressed permission only if a competent close relative, even a

367	Jamal et al., "Organ Transplantation in Kuwait," 2126.	
368	Jamal et al., "Organ Transplantation in Kuwait," 2125.	
369	International Registry in Organ Donation and Transplantation, "Final Numbers 2021," 7, 4.	
370	International Registry in Organ Donation and Transplantation, "Final Numbers 2021," 9.	
371	International Registry in Organ Donation and Transplantation, "Kuwait."	
272	Desussent an No. 55 of 10.95 on Oursen Themenlantation	

372 Decree on Law No. 55 of 1987 on Organ Transplantation.

second-degree relative, gives their consent at the time of death. If there are more close relatives of the same degree present, the consent of all should be obtained (Art. 5). In any case, the law prescribes that a written acknowledgement should be obtained and signed by two competent witnesses certifying that no objection by the deceased was acknowledged during their lifetime (Art. 5 par. 2). However, in cases where a patient needs an organ and is in danger of dying, the law permits the removal of organs from corpses after consent has been given by a committee of three. In these circumstances, the transplant cannot occur until the Minister of Health approves it (Art. 6).

Before donation, death must be verified by a committee of three specialized physicians, one of whom should be a specialist neurologist or neurosurgeon, provided that the surgeon operating is excluded (Art. 5 par. 1). The selling of organs or receiving any payment in return for organs is prohibited (Art. 7). The consequences of violations of this law include imprisonment and fines (Art. 10). The law entails an administrative rule that health care institutions and hospitals have to be officially authorized for retrieval and transplantation by the Ministry of Health (Art. 8).

2.3 Assessment

Congruent with Islamic legal rules expressed in fatwas on organ transplantation, donating vital organs is prohibited. Moreover, following Islamic legal rules, organ retrieval is only allowed to save another life. The law follows the majority opinion in allowing deceased donation. The brain death criteria are not regulated in the law, which is in accordance with Islamic legal opinion. The majority opinion of legal scholars concedes the criteria defining death to medical science.

In general, the law incorporates the basic requirements for an ethical regulation of organ transplantation provided by the *WHO Guiding Principles*.³⁷³ The Kuwaiti law fulfils Principle 5 in prohibiting the purchase or sale of an organ. Following the *WHO Guiding Principles*, the consent of the living donor is made a requirement for organ removal (Principle 1). Principle 3 requires living donors to be informed of the probable consequences of donation; they should be legally competent and act free of undue influence or coercion. Although the law fulfils the requirement of informed consent and legal competence, it does not explicitly state that consent must be given willingly.

Principle 3 favours living donation to genetically, legally, or emotionally related individuals, which the Kuwaiti law does not prescribe. Because the law does not mention the selection of recipients, it can be assumed by *argu*-

mentum e contrario that related and unrelated living donation is permitted. The favouring of related living donations expressed in Principle 3 is thus not incorporated in Kuwaiti law.

The WHO Guiding Principles further state that organs from the deceased are only to be removed when there is no reason to believe that the deceased person objected to such removal (Principle 1). Because deceased donation is only allowed with the consent or presumed consent of the deceased in Kuwait, donation follows the opt-in model. If the deceased did not give consent during their lifetime according to the rules provided by this law, their relatives need to consent while acting by the presumed will of the deceased. According to the wording of this law, the relative who is competent to give consent must be a 'close' relative. The law specifies that if there is more than one close relative of the same degree present at the time of death, all the relatives need to consent (Art. 5). The wording of Art. 5, however, raises many questions. What are the requirements for being considered a 'close' relative? What if relatives from different degrees are present at the time of death? Which degree of relatives prevails? One could assume that the first degree prevails because the first degree is closer, but Art. 5 also mentions that a 'close' relative could be a relative from the second degree. Another problematic issue concerning Principle 1 can be found in Art. 6 of the Decree-Law No. 55 of 1987, which states that organs can be retrieved from a deceased person if a recipient is in urgent need, provided the Minister of Health has given their approval to this procedure. It is unclear whether this Provision can override any objection of the deceased expressed during their lifetime, which would neglect Principle 1, or whether it can override the objection of relatives. The wording of the law is not clear on this matter.

The Kuwaiti law lacks a Provision fulfilling Principle 2 that prohibits physicians who determine a donor's death from being involved in organ removal. Furthermore, the Kuwait regulations have not established rules that determine the allocation rules to be equitable, externally justified, and transparent (Principle 9).

3. United Arab Emirates (UAE)

3.1 In General

Before organ transplantation was performed in the UAE, patients needing transplant services were sent abroad. The first living related kidney transplant was performed in 1985. In the late 1980s, two deceased-donor kidney transplants were performed with organs donated by Eurotransplant.³⁷⁴ In 1993, in

³⁷⁴ Al Sayyari, "History of Renal Transplantation in the Arab World," 1042; Al-Sulaiman et al., "Organ Transplantation in Arabian Gulf Countries," 671.

line with earlier Saudi and Kuwaiti transplantation regulations, UAE Federal Law No. 15 on the Transfer and Transplant of Human Organs was enacted. Although the law allowed donations from living and deceased donors, it did not define death or provide criteria for diagnosing it. Thus, whether physicians could rely on the concept of brain death remained unclear. Through the individual and collective efforts of Muslim legal scholars and international fatwa committees, the opinion was accepted that brain death is a form of death and that organ removal from a brain-dead person is permitted from a religious point of view.³⁷⁵

In May 2010, UAE Ministerial Decision No. 566 on the Implementing Regulation of the Organ Transplantation Law was issued. It defined death, permitting surgeons to remove organs from brain-dead patients. It also established guidelines for multiorgan donation, including kidneys, livers, lungs, pancreas, and hearts.³⁷⁶ The legal framework for deceased donation after brain death was created after the issuance of the Ministerial Decree No. 550 in 2017 by the Ministry of Health and Prevention.³⁷⁷ This decree confirmed the legal definition of brain death and was complemented by the UAE Federal Decree-Law No. 5 of 2016, which allowed transplantation of human organs and tissues.³⁷⁸ In 2017, the first multiorgan procurement from a brain-dead donor occurred in Sharjah. In the same year, the first deceased-donor heart transplant was performed in Abu Dhabi.³⁷⁹ A year later followed the first deceased-donor liver transplant, the first single lung transplant, the first double lung transplant and the first living donor liver transplant.³⁸⁰

The recent and considerable progress in organ transplantation in the UAE has accompanied modernization of the healthcare system. Federal and local governments have jointly established multiple regulatory bodies, such as the Ministry of Health, the Health Authority Abu Dhabi (HAAD), the Dubai Health Authority (DHA), and the Emirates Health Authority (EHA). These bodies are responsible for administering free public healthcare services for UAE nationals. Additionally, the Sharjah Health Authority (SHA) was founded in 2010. The UAE

375	See Schneider Kayasseh,	"Organ Transp	lantation in the	United Arab	Emirates," 17.
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376 Ministerial Decision No. 566 of 2010 on the Implementing Regulation of the Organ
Transplantation Law, UAE.
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³⁷⁷ The Ministerial Decree No. 550 of 2017 on the Declaration of Death, UAE.

³⁷⁸ Federal Decree Law No. 5 of 2016 on the Regulation of Human Organs and Tissue Transplantation, UAE.

³⁷⁹ Shiva Kumar et al., "Liver Transplantation in the United Arab Emirates from Deceased and Living Donors: Initial 2-Year Experience," *Transplantation* 105, no. 9 (2021): 1882.

³⁸⁰ Kumar et al., "Liver Transplantation," 1882.

Constitution, which provides the legal framework for the federation, grants the federal government exclusive legislative powers over a range of issues related to the federation. The local governments have jurisdiction over matters not assigned by the Constitution to the federal government's exclusive jurisdiction and not yet regulated by the federation. While the federal government has the exclusive authority to enact laws in the realm of public health, medical services, and insurance of all kinds, the individual Emirates have the duty to implement such federal laws, including the power to issue local laws and regulations to implement federal legislation.³⁸¹ The field of organ transplantation is thoroughly regulated thanks to organizational clarity across the various legislative jurisdictions. In the meantime, the UAE Ministry of Health and Prevention (MOHAP) has formed a national donors' registry. According to this programme, anyone in the UAE can become a donor or recipient of organs regardless of their nationality, and information on this is linked to a person's Emirates ID.³⁸²

In the UAE, organs have been transplanted regularly from at least 2013 onwards. Today, almost all types of organ transplant, including kidney, liver, heart, pancreas, and lungs, are performed in the UAE.³⁸³ According to the most recent data published by the International Registry in Organ Donation and Transplantation, from 2021, the deceased-donor rate is 3.90 pmp. The population of this country is around nine million. In the African and Mediterranean Regions, the UAE has the highest rate of deceased donation after Iran and Kuwait. The living donor rate is 7.40 pmp.³⁸⁴

3.2 Regulations

The governing laws in the United Arab Emirates are Federal Law No. 15 of 1993 on Regulating the Transfer and Transplant of Human Organs,³⁸⁵ Ministerial Decision No. 566 of 2010 on the Implementing Regulation of Federal Law No. 15 of 1993,³⁸⁶ UAE Federal Decree-Law No. 5 of 2016 on the Regulation of Human Organs and Tissue Transplantation,³⁸⁷ and the Cabinet Resolution No. 25 of

381	Schneider Kayasseh, "Organ Transplantation in the United Arab Emirates," 14-15.
382	The UnitedArabEmirate'sGovernmentalPortal, ``OrganDonationandTransplant''.
383	International Registry in Organ Donation and Transplantation, "UAE".
384	International Registry in Organ Donation and Transplantation, "Final Numbers 2021," 7, 4, 9.
385	Federal Law No. 15 of 1993 on Regulating the Transfer and Transplant of Human Organs, UAE.
386	Ministerial Decision No. 566 of 2010 on the Implementing Regulation of the Organ Transplantation Law.
387	Federal Decree Law No. 5 of 2016 on the Regulation of Human Organs and Tissue Transplantation.

2020. These are the executive regulations of the UAE Federal Decree Law No. 5 of 2016.³⁸⁸

The Federal Law No. 15 of 1993 on Regulating the Transfer and Transplant of Human Organs states that living and deceased organ donation is permitted to treat and save the life of the recipient (Art. 1). If the removal leads to the death of the donor or seriously inflicts harm on their well-being, organs cannot be donated from a living person, even with their consent (Art. 3). The medical team must inform the living donor of all established and potential outcomes resulting from the organ removal (Art. 4). The law further states that a living donor may retract their offer at any time prior to the removal (Art. 5).

Deceased donation is allowed on condition that the deceased has expressed their will to donate during their lifetime in the form of written consent signed by the donor in the presence of two witnesses. The will to donate during the lifetime or after death must be expressed with full legal capacity (Art. 2). In case the deceased donor has not expressed their will during their lifetime, organs may be transferred if the next of kin up to the second degree gives consent according to Art. 6. If there is more than one relative of the same degree, a majority consent is required in written form on condition that death has been verified by a committee consisting of three physicians, of whom one is specialized in neurology. Art. 6 also prescribes that the operating physician should not be on the committee. Art. 7 regulates that the sale or purchase of organs should be prohibited under threat of punishment (Art. 10).

The Ministerial Decision No. 566 of 2010 on the Implementing Regulation of Federal Law No. 15 of 1993 explains and at points repeats the Provisions of Law No. 15. The Ministerial Decision clarifies that 'fully capacitated' means a person who is 21 years of age, enjoys mental capacity and has not been interdicted. According to Law No. 15 of 1993, a person with full capacity can legally consent to organ donation. The Ministerial Decision in Art. 3 further prohibits the removal of an organ from a fully or partially incapacitated person and rules that the consent of such a person to removal or the approval of their legal representative does not constitute valid consent.

Art. 2 of the Ministerial Decision No. 556 states that human dignity must be respected during the removal of the organs and protected from humiliation or deformation (Art. 2). The Ministerial Decision repeats in Art. 3 that a living person cannot donate vital organs. It adds that reproductive organs or organs that might reproduce genetic traits from a living person's body or a human cadaver cannot be transplanted into another person's body.

³⁸⁸ Cabinet Resolution No. 25 of 2020 on the Executive Regulations of the UAE Federal Decree Law No. 5 of 2016 on Regulation of Human Organs and Tissue Transplantation, UAE.

The Ministerial Decision regulates the conditions for ensuring that the consent of a living donor is given freely. Art. 4 prescribes conducting all the medical tests required to verify that the removal of the organ and the surgery will not cause harm to the donor; performing psychological examinations to ensure that the donor is acting with free will; and informing the donor of the test results, of potential side effects resulting from the removal of the donated organ, and of potential side effects to their personal, family, and professional life.

UAE Federal Decree Law No. 5 of 2016 on the Regulation of Human Organs and Tissue Transplantation concerns technical and administrative matters. It aims at regulating and developing transplantation operations, preservation and transfer of human organs, banning human organ trafficking, protecting the rights of recipients and donors, regulating the process of donating human organs, and preventing the exploitation of the donor's needs (Art. 3). Law No. 5 of 2016 regulates hospital licences (Art. 4), the costs of operations (Art. 6), organ transplantation committees (Art. 10 and 11), the terms of organ transplantation (Chapters 2 and 3), and penalties (Chapter 4). In Art. 17, the law specifies the persons from whom consent need to be obtained if a person died without leaving a will about deceased donation. The persons specified in the law are mainly male next of kin: first, the father, second, the elder son, and so forth. The consent of either of the spouses comes last.

Law No. 5 of 2016 further regulates the detailed terms of transfer from living donors. Art. 12 para. 3 states that donation of human organs is limited to relatives up to the fourth degree, spouses married for at least two years, relatives of either spouses as for the other spouse up to the fourth degree, and exchange transfer of organs extracted from the relatives of the donor and recipient up to the fourth degree.

The executive regulations of the UAE Federal Decree Law No. 5 of 2016 are formulated in Cabinet Resolution No. 25 of 2020. This resolution regulates the requirements for licensing medical facilities and physicians (Art.s 2-4) and requirements for post-death donation approval (Art. 6), including the regulation that a record of individuals willing to donate should be set up (Art. 7). It also regulates reciprocal transplantation. Art. 5 states that reciprocal transplantation is permitted when no kinship ties exist up to the fourth degree. Decree Law No. 5 of 2016 and Cabinet Resolution No. 25 of 2020 therefore state that unrelated living donation is only possible in a limited way.

Art. 1 of the Ministerial Decree No. 550 of 2017 on the Declaration of Death³⁸⁹ defines death as complete cardiac-respiratory arrest and the complete and irreversible loss of all brain functions. It further regulates that death is to

be declared upon the physician's decision that such arrest and cessation is complete and irreversible according to the criteria in this Decree's Annex. The Annex is a detailed list of medical criteria for determining death from complete cardia-respiratory arrest and from complete and irreversible loss of all brain functions.

3.3 Assessment

The UAE regulations are in accordance with Islamic legal rulings on organ transplantation. Organ donation is permitted in the UAE in consonance with Islamic legal rules to save lives when it does not involve vital organs without which the donor cannot live and when it does not lead to the disfigurement of the living or deceased donor. Furthermore, the brain death criteria in the UAE regulations follow medical criteria. According to Islamic legal scholars, the death criteria fixed by the medical sciences can be adhered to for deceased organ donation.

The UAE's regulation respects Islamic legal opinions expressed about artificial reproductive technology by prohibiting the transplantation of tissues and organs that could potentially lead to the 'mixing of genealogy', which is forbidden in In Sunni Islam. 'Mixing of genealogy' here means the obscuration of clear kinship lines, which Islamic law prohibits because the preservation of bloodlines is part of the *maqāsid al-sharī*'a (goals of the sharia).³⁹⁰

The UAE regulations also follow the basic principles established by the international community and represented in the *WHO Guiding Principles*. In conformity with Principle 2, the physicians determining brain death are not to be involved in the organ removal operation. Consent, as foreseen by the *WHO Guiding Principles*, is essential in the regulations of the UAE. Living donors in the UAE must give informed consent and donate willingly, free of undue influence or coercion (Principle 3). Principle 3 also requires living donors to be genetically, legally, or emotionally related to their recipients. The UAE regulations fulfil this principle because living donation is permitted for related donation.

Another concordance between the UAE regulations and the WHO Guiding Principles is that the UAE regulations do not allow minors to donate (Principle 4). In the UAE regulations, only fully legally competent persons can donate, which excludes persons under the age of 21.

The UAE follows Principle 5, which prohibits the sale and purchase of organs. The two principles that are not fully adhered to are Principle 1 and

³⁹⁰ See International Islamic Fiqh Academy, "Qirarāt Al-Dawra as-Thāmina Al-Munʿaqida: Al-Qirār Al-Thānī Bi-Shaʿn Al-Talqīḥ Al-Istināʿī Wa Atfāl Al-Anābib (Al-Majmaʿ Al-Fiqhi Al-Islami 2004 [1985])"; Clarke, Islam and New Kinship, 107.

Principle 9. Principle 1 states that prior consent is required for deceased donation, and if the deceased has not expressed their will during their lifetime, it has to be ensured that there is no reason to believe that the deceased objected to such removal. However, the UAE regulations require the next of kin to provide consent if the deceased left no will but without specifying that the decision has to be made according to the presumed will of the deceased. Another issue that is not regulated in the UAE regulations is allocation rules, which according to Principle 9 should be equitable, externally justified, and transparent.

4. Qatar

4.1 In General

In the early 1980s, patients needing organ transplants from Qatar sought treatment abroad. The country's first kidney transplant was successfully performed in 1986.³⁹¹ This was followed by the first deceased-donor kidney transplant in 1988.³⁹² After the passage of Law No. 21 in 1997 on the Regulation of Organ Transplantation of Human Organs,³⁹³ organ transplantation was officially legalized in Qatar. The Law was updated and renewed in 2015.³⁹⁴

The Doha Donation Accord was created in 2009. The Doha Donation Accord (DDA) aims to increase organ donations and ensure equitable access to organs. The DDA follows the recommendations of the Declaration of Istanbul, the *WHO Guiding Principles*, and the Declaration of Istanbul Custodian Group and Transplantation Society (TTS). It seeks to encourage organ donation, provide optimal medical care for donors and their families, register donors appropriately, and honour those who donate their organs and families. Additionally, the DDA aims to ensure that the allocation of organs is made equitably within Qatar to suitable Qataris and foreign residents in Qatar alike without regard to gender, ethnicity, religion, or social or financial status.³⁹⁵

This Accord led to the establishment of the Qatar Centre for Organ Transplantation and Qatar Centre for Organ Donation in 2011 and 2012, respectively, which have been pivotal in the regulation of organ transplants in the country.³⁹⁶ The transplant programme has established clinical standards to oversee

^{M. A. Bakr, A. Y. Elmowafy, and M. H. Abbas, "History of Renal Transplantation in the} Arab World," Archives of Hellenic Medicine 35, no. 2 (2020): 208.
Al Sayyari, "History of Renal Transplantation in the Arab World," 1039.
Law No. 21 in 1997 on the Regulation of Organ Transplantation of Human Organs, Qatar.
Law No. 15 of 2015 on Regulating the Human Organs Transfer and Transplantation, Qatar.
Hamad Medical Corporation Qatar, "The Doha Donation Accord (DDA)".
Yousuf Almaslamani et al., "Transplantation in Qatar," *Transplantation* 100, no. 12 (2016): 2487.

the entire process of living donation. The programme also documents living donation selection criteria that conform to the laws of the Qatari government and the principles of medical ethics. The aim is to ensure that the practice of organ transplantation complies with the established policies and guidelines, that ethical behaviour is maintained, and that there are no disparities in the evaluation process, evaluation time scales, selection criteria, or perioperative care of living kidney donors in a culturally diverse population.³⁹⁷

In December 2011, the first deceased-donor liver transplant was performed, kickstarting the liver transplant programme in Qatar.³⁹⁸ Since 2016, the only multiorgan transplant programme has been managed by the Hamad Medical Corporation in Doha, the most important tertiary healthcare provider in Qatar.³⁹⁹ The first lung transplant was performed in 2021, and three lung transplants were successfully performed in 2022.⁴⁰⁰ Pancreas and heart transplants have yet to be performed.⁴⁰¹

Organ transplants have been performed regularly in Qatar since 2002.⁴⁰² According to the most recent data published by the International Registry in Organ Donation and Transplantation, from 2021, the deceased-donor rate is 3.80 pmp. Qatar has a population of around 2.5 million. In the African and Mediterranean Regions, Qatar has the fourth highest deceased-donor rate after Iran, Kuwait, and the UAE. The living donor rate is 10.70 pmp. This is the sixth highest rate in the African and Mediterranean region after Saudi Arabia, Iraq, Jordan, Syria, and Kuwait.⁴⁰³

4.2 Regulations

In Qatar, organ transplantation is regulated under Law No. 21 of 2015 on the Regulation of Human Organ Transplantation.⁴⁰⁴ According to this Law, surgeons are permitted to transplant an organ from a living person only if the

397	Muhammad Asim, Yousuf Al-Maslamani, and Hassan Al-Malki, "Safe and Ethical Living Kidney Donation in Qatar: A National Health System's Approach," <i>Qatar Medical Journal</i> 2017, no. 2 (2017): 3.
398	Khalaf Hatem et al., "First Liver Transplant in Qatar: An Evolving Program Facing Many Challenges," <i>Experimental and Clinical Transplantation</i> 11, no. 5 (2013): 423.
399	Almaslamani et al., "Transplantation in Qatar," 2487.
400	n.a., "2022: Most Successful Year for Qatar's Organ Transplant and Organ Donation Programmes," <i>The Peninsula Qatar</i> , December 30, 2022.
401	International Registry in Organ Donation and Transplantation, "Qatar".
402	International Registry in Organ Donation and Transplantation, "Qatar."
403	International Registry in Organ Donation and Transplantation, "Final Numbers 2021."

404 Law No. 15 of 2015 on Regulating the Human Organs Transfer and Transplantation.

transfer is necessary to save the life of the recipient. In addition, the transfer is only permitted if it is the only way to satisfy this necessity and the transfer does not endanger the donor's life or health (Art. 4). Art. 12 reiterates that it is prohibited to transfer organs from a living person, regardless of the person's consent, if organ removal may lead to the death or stoppage of any of the donor's 'body's natural functions'. Law No. 21 also requires the living donor to give informed consent. Art. 5 requires the donor to have full legal capacity and to give consent in a written form, evidenced by two witnesses. The medical authority responsible for undertaking the donation procedure is required to verify that the will of the donor is free (Art. 6). According to Art. 7, the donor needs to be informed of all potential and inevitable medical consequences resulting from organ donation in a written form by a specialized medical team after a comprehensive examination of the donor. Art. 8 elaborates on the requirement of full legal capacity for consent to be considered valid. According to Art. 8, children cannot give valid consent, and their parents' or guardians' consent cannot be considered. In addition, persons with incomplete capacity cannot legally consent to organ donation.

Art. 7 regulates that the donor can retract their consent from donation at any time before the operation without restriction or condition. The law requires consent not only from the donor but also the recipient of the organ (Art. 12). It also regulates the competent physician to ensure that the organ transplantation is safe for the recipient by verifying that the organ to be transferred is valid for donation, free from any disease, and suitable for the recipient's body (Art. 12). Living donation in Qatar's Law No. 21 is in principle permitted as a related donation up to the fourth kinship degree (Art. 6). Unrelated living donation is only allowed when a patient is in urgent need of the organ. In this case, the Medical Ethics Committee needs to permit the procedure (Art. 6).

Law No. 21 also permits deceased donation (Art. 4). The law defines death as the irreversible cessation of the heart and respiratory system or irreversible cessation of all brain functions. Consent is also required for deceased donations. Art. 5 also applies to deceased donations. The donor must give written consent during their lifetime, evidenced by two witnesses. If the deceased donor has left no consent in the required form, the consent of the deceased donor's nearest relative with full capacity up to the second degree is required. If there are multiple relatives of the same rank, the consent of all is needed. The relative's consent is required in written form evidenced by two witnesses, parallel to the Provision of Art. 5 (Art. 13). However, Art. 13 further prescribes that organs will not be removed if the deceased had objected to organ transplantation while alive either in written form or as testified by witnesses of full legal capacity. The donor's death needs to be verified unanimously, according to a written report issued by a committee of three specialized medical doctors, including a neurologist. The doctor performing the organ transplantation operation should not be part of the committee determining the donor's death (Art. 13).

Last, Law No. 21's Art. 10 forbids the trade of organs by sale or purchase in addition to advertisement, promotion, or brokerage in matters related to organ transplantation.

4.3 Assessment

Qatar's law on organ transplantation fulfils the religious-legal criteria established by Islamic legal scholars. In line with Islamic legal rulings, Qatar permits organ transplantation when the procedure does not harm the donor's life or body significantly and if the procedure leads to the saving of another's life. Also, according to the majority opinion of Muslim legal scholars, which says that death is to be determined by physicians, the death criteria used in Qatari aw corresponds with the standard medical criteria for diagnosing death.

Qatari law adheres to many of the principles set forth by the *WHO Guiding Principles*, such as Principle 2, which stipulates that physicians determining brain death are not to be involved in organ removal operations. The law also adheres to Principle 3, which states that living donors must give informed consent and donate willingly and without external influence or coercion. Principle 3 favours related living donations. This aspect is also incorporated in Qatari law because living donation is permitted in principle for living related donations, and unrelated living donation is only allowed under certain circumstances.

Principle 4, which prohibits minors from donating, is also upheld in Qatari law as only fully legally competent persons may donate. The Qatari regulation has also fully incorporated the principle that deceased donation is only ethical when it ensures that the deceased expressed no objection to organ donation during their lifetime (Principle 1). Law No. 21 also follows the principle that organ transplantation should be altruistic and not a commodity to sell or purchase (Principle 5). In line with Principle 6, Qatari law also prohibits the advertisement and brokerage of organ transplantation. The only issue Qatar has not explicitly regulated is allocation (see Principle 9). However, the Doha Donation Accord (DAA) requires that organs be distributed equitably and fairly.

5. Bahrain

5.1 In General

The first organ transplant, a kidney transplant, was performed in 1995. The initiation of the living related donation programme followed a year later.⁴⁰⁵ In 1998, Law No. 16 was enacted to regulate the transfer and transplantation of human organs.⁴⁰⁶ The first deceased kidney transplant was performed in 2001.⁴⁰⁷

In 2020, the parliament approved amendments to the 1988 Human Organ Transport and Transplantation Law with the title Resolution No. 82 of 2020 Concerning the Formation of the Central Committee for the Transfer and Transplantation of Human Organs and the Rule and Procedures Regulating its Work. According to this Resolution, the central committee's task involves organizing the transfer, cultivation, preservation, and development of human organs; preventing trafficking; protecting the rights of persons from whom and to whom organs are transferred; regulating the process of donating human organs; and preventing exploitation of the needs of the patient or donor. Furthermore, the committee maintains a register of individuals who agree to live or postmortem donation (Art. 2 and 4).⁴⁰⁸

Bahrain has a population of around 1.4 million. The country is making a concerted effort to improve its renal centre and increase the number of transplants performed.⁴⁰⁹ However, Bahrain's efforts to develop a systematic approach are still in their early stages. Official data on organ donation and numbers of annually transplanted organs are currently not available.⁴¹⁰ The International Registry in Organ Donation and Transplantation (IRODaT) has only published numbers for 2004 and 2005, with only living kidney donations reported in 2004 and living and deceased kidney transplants performed in 2005.⁴¹¹ Between 1995 and 2013, a total of 120 renal transplants were performed: 100 living donations and 20 deceased donations.⁴¹² This averages

405	Moaiad A. Khder and Latifa K. AlNoaimi, "Organ Donation in Bahrain," <i>Transplant</i> <i>Research and Risk Management (TRRM)</i> Volume 11 (2019): 60.
406	Law No. 16 of 1998 Concerning the Transfer and Transplantation of Human Organs, Bahrain (1998).
407	Bakr, Elmowafy and Abbas, "History of Renal Transplantation," 208.
408	Resolution No. 82 of 2020 Concerning the Formation of the Central Committee for the Transfer and Transplantation of Human Organs and the Rule and Procedures Regulating its Work, Bahrain (2020).
409	Khder and AlNoaimi, "Organ Donation in Bahrain," 64.
410	International Registry in Organ Donation and Transplantation, "Bahrain".
411	International Registry in Organ Donation and Transplantation, "Bahrain."
412	Marwan Masri and Mehmet Haberal, "Solid-Organ Transplant Activity in MESOT Countries," <i>Experimental and Clinical Transplantation</i> 11, no. 2 (2013): 5.

6.6 kidneys per year, which is a meagre number. At present, only living and deceased kidney transplants are conducted in Bahrain, and patients in need of other organs such as the liver, lung, and heart are sent to countries such as Saudi Arabia and Jordan in collaboration with the SCOT.⁴¹³ The difficulties in establishing an effective organ donation programme may be linked to the political unrest that Bahrain experienced from 2011 to 2014 and the government's subsequent focus on re-establishing and strengthening power.⁴¹⁴

5.2 Regulations

The law governing organ transplantation in Bahrain is Decree Law No. 16 of 1998 Concerning the Transfer and Transplantation of Human Organs.⁴¹⁵ Organ donation from a living or deceased person is permitted in Bahrain on condition that a specialist doctor performs the operation and the organ transplantation saves the life of the recipient (Art. 1). According to Law No. 16, prior consent must be given for living donation (Art. 2). The donor must have full legal capacity, and consent must be given in written form and attested by two witnesses (Art. 2). However, the living donor cannot consent to the donation of an organ that leads to their own death or severely damages their well-being (Art. 3). Art. 4 of the Law No. 16 establishes that for consent to be legally valid, the living donor must be informed of all actual and potential health outcomes from the organ removal in a written form by a committee of specialists after a comprehensive health examination. The same article provides that the donor can retract their consent at any time before the operation and that they may not recover the organ donated after the transplant operation.

Consent is also required for deceased donation during lifetime according to Art. 2. For deceased donation when the deceased have not expressed their will about post mortem donation in written form, the next of kin must give consent instead (Art. 2). The next of kin are defined by Art. 5 to be relatives up to the second degree. A majority agreement is required if many relatives are of the same rank. Organs are not to be removed if the deceased has expressed any reluctance to donate an organ during lifetime. This declaration must be in written form and witnessed by two persons of full legal capacity. Art. 6 establishes an exception to Art. 5 that overrules the relatives' reluctance to donate. The Minister of Health can give consent to transplant the organs of the deceased instead on condition that a medical committee of specialist doctors

⁴¹³ Khder and AlNoaimi, "Organ Donation in Bahrain," 61.

⁴¹⁴ n.a., "Bahrain to Launch Organ Donation Database," *Trade Arabia: Business News Information*, June 17, 2013.

⁴¹⁵ Law No. 16 of 1998 Concerning the Transfer and Transplantation of Human Organs.

recommends organ removal, the recipient urgently needs the organ to survive, and the deceased donor has not objected to the transfer during lifetime. Brain death must be diagnosed by a medical committee of three specialist doctors, including a neurologist, to conclusively verify the death before the operation. The doctor performing the organ transplantation operation cannot be a member of this committee (Art. 5).

Law No. 16 also prohibits the sale and purchase of organs in Art. 7. Sanctions and punishments are established in Art. 10 for persons violating the Provisions of this Law.

5.3 Assessment

Bahraini law on organ transplantation fulfils the religious-legal criteria expressed in fatwas. Following Islamic legal rulings, Bahrain permits organ transplantation on condition that it is necessary to save another person's life and that organ removal does not catastrophically harm the living donor. Also, according to the majority opinion of Muslim legal scholars, which says that death is to be determined by physicians, the death criteria used in Bahrain's law corresponds with the standard medical criteria for diagnosing death.

Bahraini law adheres to many of the principles set forth in the *WHO Guiding Principles*. Principle 2, which stipulates that physicians determining brain death are not to be involved in the organ removal operation, is incorporated in Bahraini law. The law also adheres to Principle 3, which states that living donors must give informed consent and donate willingly and without external influence or coercion. Principle 3 favours related living donations but does not restrict them to related donations. Bahraini law does not address this topic. Therefore, Bahraini law can be assumed not to differentiate between related and unrelated living donations as long as the Provision of informed consent is fulfilled. Furthermore, Principle 4, which prohibits minors from donating, is also upheld as only fully legally competent persons may consent to donation.

The Bahraini regulation has also fully incorporated the principle that deceased donation should be allowed on condition that the deceased had no objection during their lifetime to organ donation (Principle 1). A Provision that stands out in comparison to other Gulf states is that for deceased donation: the Health Minister's approval can overrule the family's decision not to donate the organs of their kin. Principle 1 is nevertheless observed because the Minister cannot consent if the deceased has expressed their reluctance to become a post mortem donor. Law No. 16 also follows the principle that organ transplants should be altruistic and organs should not be a commodity to be sold or purchased (Principle 5). An issue that Bahrain has not addressed in its law is the question of allocation, which should be equitable according to Principle 9.

6. Oman

6.1 In General

In the early 1980s, Oman adopted the model of sending donors and recipients abroad. The Ministry of Health of the Sultanate of Oman signed an agreement with Oxford University to transplant kidneys to Omani patients from living related donors.⁴¹⁶ The first living related kidney transplant was performed in 1988, when one living-donor and two deceased-donor transplants were performed.⁴¹⁷ In the same year, the Oman Renal Transplantation Program was established as a joint venture between the Ministry of Health and Sultan Qaboos University that accepted only deceased donors and living related donors.⁴¹⁸

The Ministry of Health issued in 1994 Ministerial Decree No. 8 of 1994 regulating organ transplantation in Oman. The Decree permitted transplants only for transplants from living donors related by blood or marriage and deceaseddonor transplants, outlined the criteria for establishing brain death, and prohibited the commercialization of transplantation.⁴¹⁹ In 2018, the Ministry of Health issued the Ministerial Decision No. 179 of 2018 on the Regulation Regarding the Transfer and Transplantation of Human Organs and Tissues. It also repealed Ministerial Decree No. 8 of 1994.420 Ministerial Decision No. 179 of 2018, affirmed Oman's position on the legality of organ transplantation. The decision confirms the legality of brain-death donation under certain circumstances. The new Ministerial Decision regulates the conditions of organ donation in greater detail than the Ministerial Decree of 1994. In 2022, the Ministry of Health issued the Ministerial Decision No. 298 of 2022 Amending Provisions of the Regulation Regarding the Transfer and Transplantation of Human Organs of Tissues (Ministerial Decision No. 179 of 2018) and replaced Art. 11 by introducing a new Provision on brain death.421

The Ministry of Health is currently taking steps to streamline organ transplant procedures and prioritize those in need of a kidney or liver by medical

⁴¹⁶ Bakr, Elmowafy and Abbas, "History of Renal Transplantation," 210.

⁴¹⁷ WHO, "WHO-EM/LAB/370/E," 11.

⁴¹⁸ N. Mohsin et al., "Deceased Donor Renal Transplantation and the Disruptive Effect of Commercial Transplants: The Experience of Oman," *Indian Journal of Medical Ethics* 11, no. 3 (2014): 153.

⁴¹⁹ WHO, "WHO-EM/LAB/370/E," 11.

⁴²⁰ The Ministerial Decision No. 179 of 2018 Regarding the Regulation of the Transfer and Transplantation of Human Organ and Tissues, Oman.

⁴²¹ Ministerial Decision No. 298 of 2022 Amending Provisions of the Regulation Regarding the Transfer and Transplantation of Human Organs of Tissues, Oman.

condition⁴²² with the establishment of a database, including registration of all patients who require organ transplant and their registration in a national waiting list. Furthermore, the Ministry of Health aims to develop organ transplantation, including the dissemination of awareness among all sectors of society on the significance of donating organs before or after death.⁴²³

Official numbers on organ transplantation in Oman are difficult to obtain. The International Registry of Organ Donation has no data except for the living donor rate in 2021, which is at 0.40 pmp–a meagre number.⁴²⁴ Oman has population size of 4.5 million. According to a transplantation doctor cited in a newspaper in January 2023, 330 organ transplants have taken place since 1988, 317 of which were kidneys and 13 livers. Of these, 300 kidneys were transplanted from living donors, and 17 were taken from brain-dead donors. Liver transplants have been performed in Oman since 2021.⁴²⁵ According to the WHO, the primary transplantation source is living unrelated transplantation or commercial transplants performed abroad. Currently, major problems include an insufficient number of living related transplants, few deceased-donor transplants and the low availability of hearts, livers, and pancreases for transplantation.⁴²⁶

6.2 Regulations

The Ministerial Decision No. 179/2018 Regarding the Regulation of the Transfer and Transplantation of Human Organs and Tissues⁴²⁷ (hereafter the Ministerial Decision) defines donation as a legal act in which a living person agrees that any of their human tissues or organs are transplanted into the body of another living person without compensation. The Ministerial Decision also permits transplantation for the purpose of preserving life and for therapeutic purposes (Art. 13). It prohibits transplantation when this is likely to bring about the death of the donor, cause severe damage to or impede any of the functions of the organs of the donor, or when the donor is afflicted with a disease that is likely to cause harm to the health of the recipient (Art. 6).

All types of donation are subject to the written consent of the donor. Prior to the organ transplantation procedure, a specialist doctor is required to con-

422	Kabeer Yousuf, "Oman Makes Major Strides in Organ Transplantation," <i>Oman Observer</i> , January 7, 2023.
423	n.a., "Oman's Ogan Donation Campaign Gathers Pace," <i>The Arabian Stories</i> , September 18, 2022.
424	International Registry in Organ Donation and Transplantation, ``Final Numbers 2021.''
425	Yousuf, "Oman Makes Major Strides."
426	WHO, "WHO-EM/LAB/370/E."
427	The Ministerial Decision No. 179 of 2018 Regarding the Regulation of the Transfer and Transplantation of Human Organ and Tissues.

duct a comprehensive medical examination of the donor and to ensure the donor is well informed about the health risks that may result from the removal of the organ (Art. 8). The Ministerial Decision also prohibits the exposure of the donor to any psychological pressure, financial or moral coercion, or any other influence whatsoever intended to obtain such consent (Art. 7). Further, without any conditions or restrictions, the donor is given the right to withdraw consent at any time before the transplantation operation is initiated (Art. 9).

For living donation, the regulation additionally requires the donor to have reached the legal age of majority and to have full legal competence for legally valid consent (Art. 4). Living donation is permitted in the case of related donation. Art. 4 requires the donor to be a relative of the recipient up to the fourth degree. In exceptional cases, when the recipient is in dire need of the transplant, the same article provides that donation may be made by a nonrelative, subject to the approval of a committee formed by the Minister of Health (see Art. 2). According to Art. 3, the committee is responsible for developing clinical evidence and protocols, medical ethics for organ transplantation, and defining organ allocation criteria and waiting lists.

For deceased donation, the Ministerial Decision's Art. 10 requires the following conditions to be met: Firstly, there must be a written will in place. If the deceased has not left a will expressing their consent, consent must be obtained from the next of kin; secondly, death must be established according to Art. 11 of this Ministerial Decision. Art. 11 was later altered by Ministerial Decision No. 298 of 2022 Amending Provisions of the Regulation of the Transfer and Transplantation of Human Organs and Tissues. Art. 11 of Ministerial Decision No. 298 of 2022 requires death to be confirmed in a report by two physicians specialized in neurology, anaesthesiology, or intensive care and requires that neither of them be involved in the transplantation procedure.

The Ministerial Decision also prohibits a physician from conducting an organ transplant if they become aware that the organ to be transplanted has been obtained in return for compensation (Art. 16). Furthermore, the Ministerial Decision prohibits the sale and purchase of organs (Art. 21) and cases where transplantation could lead to a 'mixing of lineages' (Art. 20). Chapter VII of the Ministerial Decision defines penalties in case of violations of its Provisions.

6.3 Assessment

Oman's law on organ transplantation fulfils the religious-legal criteria expressed in fatwas. In line with Islamic legal rulings, organ transplantation is permitted on condition that it is necessary to save another person's life and that organ removal does not catastrophically harm the living donor. Also, according to the majority opinion of Muslim legal scholars, which says that death is to be determined by physicians, the death criteria are not defined in its regulation. Oman's regulation only provides the administrative rules by which death needs to be determined. In Oman's case, death needs to be confirmed by medical experts.

Interestingly, Oman's regulation on organ transplantation respects Islamic legal opinions expressed in the context of artificial reproductive technology by prohibiting the transplantation of tissues and organs that could potentially lead to the 'mixing of genealogy'. In Sunni Islam, Islamic scholars prohibit assisted reproductive treatments involving third parties because they could lead to a 'mixing of genealogy'. 'Mixing of genealogy' here means the obscuration of clear kinship lines, which Islamic Law prohibits because the preservation of bloodlines is part of the *maqāsid al-sharī'a* (goals of the sharia).⁴²⁸

The Omani Ministerial Decision adheres to many of the principles set forth by the *WHO Guiding Principles*. Principle 2, which stipulates that physicians determining brain death are not to be involved in the organ removal operation, is incorporated in Omani law. The law also adheres to Principle 3, which states that living donors must give informed consent and donate willingly and without external influence or coercion. Principle 3 is also respected in Oman's regulation favouring living related donation: unrelated living donation is only permitted in exceptional cases. Furthermore, Principle 4, which prohibits minors from donating, is also respected in Oman's regulations, as only fully legally competent persons may consent to donation. Principle 9, which postulates equitable allocation rule to be regulated by states in their national laws, is addressed in Oman's Ministerial Decision in so far as the it states that a committee needs to define the allocation rules for organ distribution.

According to Principle 1, organ removal from a deceased donor is ethical because the deceased has not objected to the donation. Oman's regulation requires that the deceased's consent was expressed during their lifetime. Only exceptionally when the deceased has not left a will can the next of kin consent to the organ donation. However, Oman's regulation does not require the next of kin to act according to the presumed will of the deceased.

7. Yemen

7.1 In General

In 2023, Yemen enters the ninth year of a conflict that has led to an acute humanitarian crisis. The prolonged conflict compounded by the ongoing macroeconomic crisis, recurring natural disasters, such as droughts and floods, has led to high levels of food insecurity and a lack of access to essential services. The *Yemen Report* published by the United Nations Office for the Coordination of Humanitarian Affairs estimates that in 2023 some 21 million people (out of the population of 30 million) will need humanitarian assistance, including some 13 million in acute need. The humanitarian crisis has affected Yemen's health system, which is on the brink of collapse.⁴²⁹ The WHO reports that in 2020 more than 17 million people needed healthcare services, and the numbers have increased since then. According to the WHO, only 50% of health facilities are fully functioning, and those that remain open lack qualified health staff, basic medicines, medical equipment, and other essential supplies.⁴³⁰

In this unstable political environment and this humanitarian crisis, a nongovernmental Yemeni organization, the Yemen Organization for Combating Human Trafficking, has reported that 300 documented cases of organ sales have taken place since the start of the war in March 2015. For these organ sales, Yemeni people have been trafficked to Egypt. The NGO has also stated that the real numbers could be much higher as many cases remain unreported due to the illegality of the practice.⁴³¹

These circumstances preclude the sophisticated medical environments required to meet the physical and psychological demands made by organ transplants: organ transplantation is not practised in Yemen. In the literature, a report can be found on the first kidney transplantations in Yemen, which took place in 2003. It was also reported that the medical equipment and supplies were overwhelmingly lacking. The report also stated that data presented at the First International Congress of Uro-Nephrology in Aden in 2003 showed that around 30% of all patients in need of haemodialysis die within two years in Yemen. Patients who can afford to travel abroad go to India or the Philippines to receive a transplant. The first organ transplant in Yemen was possible after Law No. 26 of 2002 Regarding the Practice of the Medical and Pharmaceutical Professions was enacted.⁴³² No other data or reports can be found on the further development of organ transplantation in Yemen.

⁴²⁹ United Nations Office for the Coordination of Humanitarian Affairs, "Yemen Humanitarian Update".

⁴³⁰ WHO, "Yemen Crisis," accessed January 31, 2023.

⁴³¹ Fuad Rajeh and Charlene Rodrigues, "Desperate Yemenis Sell Organs to Survive," *Al Jazeera*, September 15, 2017.

⁴³² Robert D. Fitzgerald, Felix Stockenhuber, and Annelies Fitzgerald, "Dealing with the Uncertain and the Unexpected: A Report on the First Kidney Transplantation in Aden, Republic of Yemen," *Annals of Transplantation* 10, no. 1 (2005): 3, 4.

7.2 Regulations

The Law No. 26 of 2002 Regarding the Practice of the Medical and Pharmaceutical Professions⁴³³ governs organ transplantation in Yemen. According to Art. 27, transplantation is allowed on condition that the requirements for organ transplantation are met: the health condition of the donor must allow the donation without affecting their health significantly; the receiver must need an organ transplant; and the organ to be transferred must be in good condition. Additionally, organs from a living donor can only be transplanted from a firstor second-degree relative, and the donor should be above the age of 20. These conditions need to be confirmed by a medical specialist committee prior to the operation (Art. 27).

Organ transplantation is allowed provided that both the donor and the recipient are informed about the procedure and the risks, and that free, informed consent is obtained in written form (Art. 24 and 27). The donor has the right to withdraw their consent at any given time before the transplantation (Art. 28). Furthermore, Art. 29 prohibits the transfer of organs from persons without legal competence because they cannot express their will in a valid form. Art. 27 prohibits transplantation under conditions that are contradictory to the ethics of the medical profession, such as the organ trade. Chapter 6 of the Law regulates the penalties in case of violation.

7.3 Assessment

Yemen's law on organ transplantation fulfils the religious-legal criteria expressed in fatwas. In line with Islamic legal rulings, organ transplantation is permitted on condition that the recipient needs an organ, which can be subsumed under the criteria for saving a life expressed in fatwas. Yemeni law also fulfils the criteria established in fatwas that a donation is only permitted when it does not harm the donor. Yemeni law ensures this by prescribing health check-ups prior to donation.

Yemeni law respects many principles set forth in the *WHO Guiding Principles*. The law adheres in its regulations to Principle 3, which states that living donors must give informed consent and donate willingly and without external influence or coercion. Principle 3 also favours living related donations. Yemen's Law also respects Principle 3 in that unrelated living donation is not permitted. Furthermore, Principle 4, which prohibits minors from donating, is also upheld as only fully legally competent persons may consent to donation.

⁴³³ Law No. 26 of 2002 Regarding the Practice of the Medical and Pharmaceutical Professions, Yemen.

Yemeni law also adheres to the *WHO Guiding Principles* by prohibiting the organ trade (see Principle 5).

The law in Yemen does not regulate deceased donation, which means that deceased donation is not permitted. This goes against the majority view of Islamic legal scholars that deceased donation is permitted under some conditions. The nonregulation of deceased donation also contradicts Principle 1 of the *WHO Guiding Principles* because Principle 1 requires the regulation of consent for deceased donation. Yemeni law does not address allocation issues either (Principle 9).

III. The Levant and Iran

- 1. Jordan
- 1.1 In General

Jordan is one of the first countries in the region to have conducted organ transplantation in its hospitals. The first kidney transplant was performed in 1972. Jordan was also one of the leading countries in developing legislation to regulate organ donation, transfer, and transplant.⁴³⁴ This issue is addressed in Jordan by Law No. 23 of 1977, which concerns benefiting from human organs, as well as by updates to the law in 1980 and 2000. These laws define organ transplantation as the removal, excision, or extraction of an organ from a living person or cadaver and the organs' modification or implantation into a living human beneficiary. They also specify the conditions for transplant centres to be qualified to perform operations and donations after brain death. Jordan has also established a National Committee, headed by the Minister of Health and Doctors Syndicate, to organize the donation of organs.⁴³⁵

The first heart transplant was performed in 1985, the first lung transplant in 1997, and the first liver transplant in 2004.⁴³⁶ In 2010, the National Center of Organ Transplantation was founded in collaboration with hospitals and local and regional bodies to develop and regulate organ donation and transplantation, the exchange of information and expertise in this area, awareness raising, and encouraging organ donation and transplantation. The Center has set standards and created a national register for organ donation. However, these

⁴³⁴ The Higher Health Council of the Hashemite Kingdom of Jordan, "National Strategy for Health Sector in Jordan 2015-2019".

⁴³⁵ Law No. 23 of 1977 regarding the Utilization of Human Organs, Jordan; Amendment Law No. 18 of 1980, Jordan; Amendment Law No. 23 of 2000, Jordan.

⁴³⁶ Saleh Hammad and Abdel-Hadi Albreizat, "Living-Donor Organ Donation: Impact of Expansion of Genetic Relationship," *Experimental and Clinical Transplantation* 17, Suppl 1 (2019): 1.

services need competent management and further cooperation and coordination between all stakeholders, particularly concerning data and information in this area.⁴³⁷

The data published by the International Registry in Organ Donation and Registration show that organ transplantation has been performed in Jordan regularly since 2003. Kidney transplants have been performed from deceased donors since 2004. Livers are also transplanted regularly. The first deceaseddonor liver transplant was in 2017, and the numbers have increased every year since then.⁴³⁸ The most recent numbers published by the International Registry in Organ Donation and Registration in 2021 show that the living donor rate in Jordan is relatively high at 19.42 pmp, ranking Jordan eighth in the world and third in the African and Mediterranean region after Saudi Arabia and Iraq. However, Jordan's deceased-donor rate is the lowest among the six states that conduct deceased donations in the African and Mediterranean region with a rate of 0.19 pmp.⁴³⁹

In Jordan, the health situation is relatively good due to stable political conditions. However, the economic environment is challenging for many people. Incidents of organ trading have been reported. In Jordan, poverty affects a substantial proportion of the population, especially migrants and refugees from the neighbouring states in crisis, such as Palestine, Iraq, and Syria. In the past few years, the organ trade has been reported to flourish in the black market, although no reliable estimates have been advanced.⁴⁴⁰

1.2 Regulations

Organ transplantation is addressed in Jordan by Law No. 23 of 1977 Regarding the Utilization of Human Organs.⁴⁴¹ Amendments to this Law were made in 1980 by Amendment Law No. 18⁴⁴² and 2020 by Amendment Law No. 23.⁴⁴³ Art. 3 of Law No. 23 regulates the conditions that need to be met when removing an organ for transplant: living and deceased organ transplantation must

437	The Higher Health Council of the Hashemite Kingdom of Jordan, "National Strategy for Health Sector."
438	International Registry in Organ Donation and Transplantation, "Jordan".
439	International Registry in Organ Donation and Transplantation, "Final Numbers 2021."
440	Khalili and Mohammed I., "Organ Trading in Jordan: Bad News, Good News," <i>Politics and the Life Sciences</i> 26, no. 1 (2007); United States Department of State, "2021 Trafficking in Persons Report Jordan"; n.a., "Organ Trafficking Turns into Trending Market: Victims Are Syrians," <i>Enab Baladi</i> , November 12, 2022.
441	Law No. 23 of 1977 regarding the Utilization of Human Organs.
442	Amendment Law No. 18 of 1980.

⁴⁴³ Amendment Law No. 23 of 2000.

comply with the fatwas issued by the Jordanian Iftaa Council; organ transplantation must be performed in hospitals that fulfil the medical and technical requirements for organ removal by a team of specialized physicians; and lastly, medical assessment of the living donor and the recipient must be conducted prior to the operation to determine whether the donor's health allows for safe organ removal and whether the recipient needs an organ donation. Other conditions are set by Art. 4 for legal organ removal: it is prohibited to remove vital organs that lead to the death of the donor even if the donor has given consent; the fact that organ removal does not endanger the donor's life needs to be confirmed by a committee of three specialized physicians; and the conscious and fully competent donor needs to give consent in writing prior to organ removal.

Art. 5 regulates that the donor must have expressed consent in a written and signed will during their lifetime for deceased donation to be legal. If such a will does not exist, the deceased's parents or, in their absence, the legal guardian must consent. The Law further prohibits deceased-donor organ transplantation before verifying death (Art. 8). Death must be verified in a medical report given by a committee of three physicians specializing in neurology, neurosurgery, and anaesthesiology (Art. 9). The physicians involved in determining death must not take part in the organ transplantation operation (Art. 8 and 9). Organ removal is permitted from unidentified deceased persons within 24 hours of death and with the approval of the public prosecutor (Art. 5). The law prohibits organ removal for deceased donation if it leads to a visible deformation of the body because it undermines the *hurma* (dignity) of the deceased's body (Art. 7). The sale and purchase of organs are prohibited (Art. 4). Penalties in case of violation of the law are regulated in Art. 10.

1.3 Assessment

Jordan's law on organ transplantation accords with the Islamic legal principles expressed in fatwas. Following majority Islamic legal opinion, Jordan's law permits organ transplantation to save a life on condition that it does not involve the removal of a vital organ of a living donor. Jordan's law also permits deceased donation in concordance with Islamic rulings, which means that the death criteria are left to be determined by medical professionals. Furthermore, Jordan has regulated that organ removal from a deceased shall not deform the corpse. The deformation of the corpse and, thus, the violation of the deceased's *hurma* (dignity) is a significant concern from an Islamic legal point of view. Jordan's law has incorporated this ruling. In contrast to most other Muslim-majority states, Jordan's law grants religious actors an official role. Jordan's law stipulates that the Jordanian Iftaa Council's rulings on brain death should be respected in organ transplantation procedures.

Jordanian law adheres to Principle 2 of the *WHO Guiding Principles*, which stipulates that physicians determining brain death should not be involved in organ removal. Furthermore, Principle 4, which prohibits minors from donating, is also respected, as only fully legally competent persons may consent to donation. Principle 5 is also upheld because Jordan prohibits the sale and purchase of organs.

The law does not fully adhere to Principle 3 of the *WHO Guiding Principles*. Jordanian law requires consent for organ removal from a living person. However, the law does not stipulate that the consent should be willing and informed through, for instance, the Provision of prior information about the risks of organ donation or that consent should be obtained without coercion. Principle 3 also expresses its favouring of living related donation. Jordan's law does not fulfil this criterion because it does not restrict living donations to a specific group of people.

Principle 1 of the WHO Guiding Principles requires as a minimum that deceased donation is not to be performed if the deceased has expressed their refusal to donate post mortem. Jordanian law grants the will of the deceased priority status because it requires the deceased's consent expressed during lifetime for organ donation. If the deceased has left no will, the parents or the legal guardian's consent is needed. However, the law in Jordan does not require the parents or the legal guardian to act according to the deceased's will. If the parents or the legal guardian of the deceased gives consent that ignores the deceased's reluctance to donate an organ, Principle 3 of the *WHO Guiding Principles* is violated. The Jordanian Law is also ethically problematic because it does not address the allocation criteria for organs.

2. Syria

2.1 In General

Organ transplantation in Syria is governed under Law No. 30 of 2003.⁴⁴⁴ Before the promulgation of this law, Law No. 31 of 1972 and its amending Law No. 43 of 1986 governed this issue. In an exemplary manner, Syria implemented organ transplantation regulations before the first ever organ, a kidney, was transplanted in 1985.⁴⁴⁵ The Law No. 31 of 1972 and the amended No. 43 of 1986 were issued to encourage people to donate their organs to save the lives of other people who are in need. However, it quickly became evident that the purpose was not achieved. Firstly, the practical application of these laws resulted in a

⁴⁴⁴ Law No. 30 of 2003 regarding Organ Transplantation, Syria.

⁴⁴⁵ Ghiath Alahmad, "Syrian Arab Republic," in Ten Have; Gordijn, *Handbook of Global Bioethics*, 1567.

lack of donations. And secondly, a global organ trade began, creating a significant risk for patients who needed a transplant and did not have enough money, to the extent that some died for lack of an organ. These factors led to the promulgation of Law No. 30 of 2003 to encourage donors and to facilitate procedures in a way that matched the accelerated scientific progress in this area.⁴⁴⁶

In 2004, Regulatory Decision No. 73/T, was implemented that contained instructions to control the black market of organ trade. Because organ trafficking was not punishable in the Law of 2003, this new Regulatory Decision filled this gap, making organ trafficking punishable by imprisonment and a fine. Another positive effect was the increased rate of kidney transplants inside the country and the lower rate of foreign travel for organ transplants.447 Although the laws issued in 2003 and 2004 were a significant step towards regulating transplantation, the practice of kidney selling by unrelated living 'volunteers' continued to flourish through disreputable brokers, especially in the private sector. This practice has raised severe ethical concerns over organ commercialism, exploitation of financially disadvantaged persons, and the undermining of public trust in the transplant system.⁴⁴⁸

In January 2008, the government of Syria made a new attempt to offset this dilemma by issuing an administrative order restricting kidney transplants to the public sector and increasing the number of public centres for transplantation from three to eight.⁴⁴⁹ The administrative order seemingly managed to oust the intermediaries and brokers but the practice of kidney selling continued to flourish in the public sector. The government had difficulty controlling this practice because the committees that interviewed donors and recipients to ensure that consent was freely given could not fully ascertain the absence of any monetary exchange in private between donor and recipient.⁴⁵⁰

The situation has again changed since the start of the Syrian conflict, which began in 2011. The Syrian conflict has destroyed much of the country's infrastructure, and the difficult humanitarian situation has also affected health workers and facilities. The Syrian conflict has affected all aspects of organ transplant, paralysing new projects and negatively affecting existing programmes. More than 50% of kidney transplant physicians and surgeons no longer practise transplant medicine in Syria because they have left the country or the

446	Alahmad, "Syrian Arab Republic," 1569.
447	Alahmad, "Syrian Arab Republic," 1569.
448	Bassam Saeed, "Development of Solid Organ Transplantation in Syria," <i>International Journal of Organ Transplantation Medicine</i> 2, no. 1 (2011): 42.
449	Alahmad, "Syrian Arab Republic," 1567.
450	Saeed, "Development of Solid Organ Transplantation," 43.

organ transplantation centres have become non-operational. The number of operational kidney transplant centres has decreased from eight in 2010, distributed over three cities, to only four in 2013, all located in Damascus. The number of centres in Damascus had increased by 2019 to six centres.⁴⁵¹ Since the war began, accessible and timely Provision of immunosuppressive drugs for all patients in all provinces has been a leading challenge for health authorities and transplant patients. This difficulty has led to adverse medical consequences for patients. A project to initiate liver transplants came to a halt mainly because foreign trainers could not visit Syria.⁴⁵²

A deceased-donor programme is still not available in Syria. In its absence, the need for an unrelated kidney donor programme has increased.⁴⁵³ Even with the limited transplantation resources in Syria, the numbers of living organ donations performed in the country are high in comparison to other countries in the region. The most recent reports state that organ transplantation from living unrelated donors is also practised when consent is given 'freely' on condition of payment between organ recipient and donor or through a broker.⁴⁵⁴

In 2010, before the war, 385 kidney transplants were performed in Syria.⁴⁵⁵ This number declined by 60% to 154 in 2013 before increasing to 329 transplants in 2022. Only kidneys have been transplanted in the last ten years, except for two liver transplants in 2019 and 2016.⁴⁵⁶ The worldwide living donor rate in 2021 for Syria was 17.20 pmp. Syria ranks fourth in the African and Mediterranean region after Saudi Arabia, Iraq, and Jordan. As mentioned, deceaseddonor transplantation has never been performed in Syria.⁴⁵⁷

2.2 Regulations

The law governing organ transplantation in Syria is Law No. 30 of 2003.⁴⁵⁸ This law replaced Law No. 31 of 1972 and its amending Law No. 43 of 1986 (Art. 10 of Law No. 30). Law No. 30 states that organ transplantation from a living donor is permitted by specialists and in medical institutions by the Ministry of Health (Art. 2 and 1). Living organ transplantation is not permitted if it involves an

451	Bassam Saeed, "How Did the War Affect Organ Transplantation in Syria?," <i>Experimen-</i> <i>tal and Clinical Transplantation</i> 1 (2020): 19.
452	Saeed, "How Did the War Affect Organ Transplantation," 19.
453	Saeed, "How Did the War Affect Organ Transplantation," 21.
454	n.a., "Organ Trafficking Turns into Trending Market."
455	Saeed, "How Did the War Affect Organ Transplantation," 19.
456	International Registry in Organ Donation and Transplantation, "Syria".
457	International Registry in Organ Donation and Transplantation, ``Final Numbers 2021, "
	4,7,9.

⁴⁵⁸ Law No. 30 of 2003 regarding Organ Transplantation.

organ that is essential for life, even if the donor has consented (Art. 2). Organs may be transplanted only from fully legally competent persons and after obtaining written consent. Minors are not permitted to donate unless the recipient and the donor are twins and after the parents' or the legal guardian's consent has been obtained. Commercial organ donation is prohibited (Art. 2).

Deceased transplantation is also permitted if the recipient needs the organ (Art. 3). The conditions are that the donation is according to the deceased's will. If there is no will, the consent of first-degree family members must be sought. In the absence of first-degree relatives, second-degree relatives can consent to postmortem donation. For postmortem organ transplantation, the law requires the transfer not to be harmful to the dignity of the deceased's body or to change its features (Art. 6). Prior to the transplant, the death of the donor needs to be verified in accordance with instructions issued by the Ministry of Health in a written report by a medical committee consisting of three physicians (Art. 5). The physicians in this committee must not include any of the medical team that performs the organ transplant.

The Syrian National Regulatory Oversight on Organ Transplantation issued in 2019 regulates brain death. Clinical death is defined as the irreversible absence of all brain functions, including the stem, except for injuries to the brain resulting from hypothermia, toxicosis, and severe glandular or metabolic disorders, according to the discretion of the competent committee. This regulatory oversight further makes precisions on the terminology of next of kin: the parents are the first-degree relations.

2.3 Assessment

Syria's law on organ transplantation fulfils, in principle, the Islamic legal principles expressed in fatwas. In accordance with religious legal opinion, Syria's Law permits organ transplantation on condition that it does not involve the removal of an essential organ from a living donor. Interestingly, the law does not mention the criterion of *darūra* (necessity). There is no mention of organ donation being permitted to save another person's life. Islamic rulings regarding deceased donation are also respected. Since, in Islamic legal-ethical opinion, deformation of the corpse and, thus, the violation of the deceased's *hurma* (dignity) is a violation of Islamic law, Syria has regulated that the organ removal from a deceased person should not deform the corpse. Furthermore, the brain death criteria are applied by medical societies, which accords with the fatwas on this topic.

When assessing Syria's regulations in light of the *WHO Guiding Principles*, the Syrian law adheres to Principle 2, which stipulates that physicians determining brain death should not be involved in organ removal operations. Furthermore, Principle 4 is respected; this permits organ removal from living minors only in exceptional cases, to be determined by the national law. Syrian law prohibits organ transplants from minors in principle because they do not have full legal capacity and allows it only in the exceptional case of twins. The prohibition of commercial transactions stated in Principle 5 is also respected because Syria prohibits the sale and purchase of organs.

The law only partially adheres to Principle 3. Syrian law requires consent for organ removal from a living person. However, it is not required that consent should be given willingly and informed through, for example, the prior Provision of information on the risks of organ donation or that consent should be obtained without coercion. Syrian law only stipulates the form of consent, which must be given in writing. Principle 3 also favours living related donation. Syria's law does not fulfil this criterion because living donation is not restricted to related donors.

Principle 1 of the WHO Guiding Principles requires as a minimum that deceased donation shall not be performed if the deceased during their lifetime expressed their reluctance to donate post mortem. Syrian law treats the will of the deceased as a priority because it requires the deceased's consent expressed during lifetime for organ removal. However, if the deceased left no will, the next of kin's consent is needed. The law in Syria does not require the next of kin to act according to the deceased's will, which can lead to a violation of Principle 3 if they consent to donation when the deceased expressed their reluctance during lifetime. Syrian law is also ethically problematic because it does not address the allocation criteria for organs.

3. Iraq

3.1 In General

Iraq's organ transplantation history began when the government started a renal transplant training programme for doctors in France and Great Britain in 1969 and 1970, respectively. In June 1973, the first organ transplantation was successfully performed with a related kidney donation. In 1985, the first renal transplant centre was established. Other renal centres followed in different parts of the country. The newest centre opened in 2007 in Najaf.⁴⁵⁹ Currently, seven renal transplant programmes are running in Iraq with varying capacities.⁴⁶⁰

460 Ali, Al-Mallah and Al-Saedi, "Renal Transplantation in Iraq," 12.

⁴⁵⁹ Ala Ali, Sahban Al-Mallah, and Ali Al-Saedi, "Renal Transplantation in Iraq: History, Current Status, and Future Perspectives," *Iraqi New Medical Journal* 1, no. 2 (2016): 11.

Iraq was one of the first countries in the Middle East to legislate organ transplantation through Resolution No. 776 of 1981 promulgating Law No. 60 of 1981 on Kidney Transplant Operations. In 1986, Decree No. 698 of 1986 promulgating Law No. 85 of 1986 on the Transplantation of Human Organs was issued. Law No. 60 of 1981 was repealed. The new Law of 1986 was refined by other regulations issued in 1989. These regulations addressed the topics of living and deceased donation, the requirements for altruistic donation, and organ transplantation from executed convicts.⁴⁶¹ In 2016, Law No. 85 of 1986 was replaced by Law No. 11 of 2016.⁴⁶²

Although Iraq was among the first Arab countries to start living donor transplantation, transplantation activities in Iraq suffered due to the Iran-Iraq war in the 1980s and the sanctions imposed due to the Gulf Wars at the beginning of the 1990s. Organ transplants declined dramatically again after the Iraq War, from 2003 to 2011.⁴⁶³ After the withdrawal of the United States from Iraq in 2011, the situation did not improve because the country witnessed the rise and fall of al-Qaida and the Islamic State of Iraq and the Levant (ISIL), which was accompanied by the return of US forces to Iraq from 2014 to 2017. This conflict again led to massive destruction and displacement of Iraqis and a humanitarian crisis.⁴⁶⁴

Currently, Iraq is in a political and economic crisis accompanied by social, ethnic, and sectarian tensions, which prolong general insecurity and operational uncertainty.⁴⁶⁵ The health infrastructure remains battered, including inadequate preventive and primary health care and no effective health insurance. There are no fully developed renal registries to enable accurate estimates of transplant data.⁴⁶⁶ Furthermore, reports indicate organ trade in Iraq and neighbouring countries has increased recently due to the deterioration of the economic and security situation. An Iraqi NGO estimated that 27 organized organ trade networks were operating in the country in in 2019. These traders and brokers falsify the age of minor donors and fabricate letters of

461	Ali, Al-Mallah and Al-Saedi, "Renal Transplantation in Iraq," 12.
462	Law No. 11 of 2016 regarding the Transplantation of Human Organs and Prevention of Trafficking, Iraq (2016).
463	Al Sayyari, "History of Renal Transplantation in the Arab World," 1034.
464	United Nations Office for the Coordination of Humanitarian Affairs, "Humanitarian Needs Overview Iraq", 5ff.
465	United Nations Office for the Coordination of Humanitarian Affairs, "Humanitarian Needs Overview Iraq," 13.
466	Ala Ali and Achraf Hendawy, "Renal Transplantation in the Middle East: Strenghts, Weaknesses, Opportunities and Threats [SWOT] Analysis," <i>Urology & Nephrology Open</i> <i>Access Journal</i> 2, no. 2 (2015): 33, 34.

consent or obtain consent from donors for the sale of an organ while exploiting the donors' difficult financial situation.⁴⁶⁷

The International Registry on Organ Donation and Transplantation (IRO-Dat) has published numbers for 2018, 2019, and 2021. Only living related and unrelated kidney transplants are performed in Iraq.⁴⁶⁸ Although Iraq is in crisis, the most recent living donor rate from 2021 is high when compared worldwide: Iraq has a living donor rate of 22.47 pmp, the sixth highest rate worldwide. Iraq has a population of around 43.5 million. In the African and Mediterranean Region, Iraq ranks second after Saudi Arabia for living organ donation.⁴⁶⁹ This raises the concern of substantial organ trading.

3.2 Regulations

Law No. 11 of 2016 regarding Transplantation of Human Organs and Prevention of Trafficking is the governing law on organ transplantation.⁴⁷⁰ Art. 5 states that organ donation is permitted only for therapeutic or scientific purposes. The same article lists the conditions for living organ donation: the removal of organs from living persons is permissible if the transfer is necessary to preserve the life of the organ recipient or for treatment of a fatal disease, and organs cannot be removed from a living donor, even with consent, if this leads to the donor's death or severe disruption to their bodily functions. It is also prohibited to transplant organs if this leads to a 'mixing of lineages'. In any case, the donor is to give explicit and written consent in the presence of a first-degree relative prior to organ donation. The introductory Provisions of Law No. 11 specify that only a person who has completed 18 years and has full legal capacity may give valid consent. Art. 7 states that a donor may retract consent before organ removal. The law provides organ donation to be free of charge (Art. 8).

The law also permits deceased donation. Art. 12 requires the deceased donors to have expressed their will to donate during their lifetime 'in accordance with the Provisions of the sharia'. If the death of the deceased is the subject of a criminal investigation, organs cannot be removed without the approval of the investigating judge (Art. 13). When transferring an organ from a deceased person, the law prescribes that the human dignity of the deceased be respected and the corpse rendered to the state prior to organ removal

468 International Registry in Organ Donation and Transplantation, "Iraq".

469 International Registry in Organ Donation and Transplantation, "Final Numbers 2021."

⁴⁶⁷ Mustafa Al-Masudi and Amer Al-Shibani, "Human Organ Trade in Iraq: Brokers in the Capital and Smugglers in the North [In Arabic]," *The Red Line*, May 15, 2021, accessed February 3, 2023.

⁴⁷⁰ Law No. 11 of 2016 regarding the Transplantation of Human Organs and Prevention of Trafficking.

(Art. 13). For deceased donation, the law additionally requires consent from the recipient or from the recipient's relatives (Art. 14). Reproductive organs are prohibited from transplants (Art. 16).

Law No. 11 also prohibits the sale, purchase, and trade of organs in Art. 9. Penalties for violation of the law are regulated in Art.s 17 to 22. The law also states that organs may be transplanted to Iraqi citizens. Non-Iraqis can profit from organ transplantation in Iraq if they are relatives of the donor (Art. 23).

3.3 Assessment

Iraq's law on organ transplantation complies with Islamic legal principles. In line with religious legal opinion, Iraq's law permits living organ transplantation to save another person's life on condition that it does not involve the removal of a vital organ. Iraq's law also permits deceased donation following Islamic rulings: deceased donation is permitted to save another person's life. Because in Islamic legal-ethical opinion the deformation of the corpse and the consequent violation of the deceased's dignity is a violation of Islamic law, Iraq requires that organ removal from a deceased person should respect the dignity of the deceased and that the corpse is rendered to the state prior to organ removal.

Iraq's law does not define brain death. However, it generally states that deceased donation must accord with the Provisions of sharia. In the case of brain death, the majority of Islamic legal scholars have ruled that the death criteria are to be determined by medical societies and that brain death is a form of death. Therefore, Iraqi law accepts brain-dead donations.

Iraqi law also incorporates an issue debated in the Islamic legal literature on reproductive technological assistance. Since clarity of kinship ties are a significant concern of the *maqāsid al-sharīʿa* (goals of sharia), it must be ensured that no mixing of bloodlines occurs between people who are not married to each other. For this reason, the Iraqi organ transplantation law has regulated that no reproductive organs may be donated to mitigate the risk of 'mixing genealogies'.⁴⁷¹

Iraq's law conforms with some of the *WHO Guiding Principles*. Iraqi Law adheres to Principle 4, which permits organ removal from a living minor only in exceptional cases, to be determined by the national law. Principle 5 on the prohibition of commercial transactions is also respected because Iraq prohibits the sale and purchase of organs.

Iraqi law also respects Principle 1 on organ transplantation from deceased donors. Principle 1 permits deceased donation when any consent is obtained

⁴⁷¹ See International Islamic Fiqh Academy, "Qirarāt al-dawra"; Clarke, *Islam and New Kinship*, 107.

from the organ donor. As a minimum requirement, the *WHO Guiding Principles* require that there is no reason to believe that the deceased person objected to such removal. The Iraqi organ transplantation law only permits deceased donation when consent from the deceased is obtained during lifetime. No regulation covers cases in which the deceased has not expressed a will during their lifetime; the law specifically does not permit the next of kin consenting instead of the deceased, as is the case in many other neighbouring states.

However, the law does not fully adhere to Principle 3. Iraqi Law requires consent for organ removal from a living person. However, it is not required that consent should be willing and informed through, for instance, the prior Provision of information about the risks of organ donation or that consent should be obtained without coercion; Iraqi law only requires written consent from the donor. Principle 3 also favours living related donation. Iraq's law does not fulfil this criterion because living donation is not restricted to related donors. Furthermore, Iraqi law has not incorporated Principle 2, stipulating that physicians determining brain death should not be involved in organ removal. This is not covered by the general Provision that the Provisions of Islamic law apply either because fatwas do not address this question. Furthermore, the Iraqi law does not address the question of allocation expressed in Principle 9.

4. Lebanon

4.1 In General

Lebanon regulated organ transplantation by Decree Law No. 109 of 1983⁴⁷² and by Regulatory Decree No. 1442 of 1984 implementing Decree Law No. 109.⁴⁷³ Whereas Law No. 109 legalized donation of organs and tissues for medical and scientific purposes, Regulatory Decree No. 1442 regulates the practical application of the Law by describing the guidelines for brain death diagnosis and defining death and the conditions for transplantation centres.⁴⁷⁴ This legislation was issued after the first transplantation in 1972 and before the first deceased organ transplant in 1990.⁴⁷⁵

In 1999, the Ministry of Health and the Lebanese Order of Physicians took the joint decision to concentrate all transplantation efforts in a single, unified organization affiliated with the Ministry of Health. Consequently, the Ministry

472	2 Decree Law No. 109 of 1983 on the Removal of Human Tissues and Organs for Therapeutic and Scientific Purposes, Lebanon.	
473	Regulatory Decree No. 1442 of 1984 Implementing the Decree Law No. 109 of 1983, Lebanon.	
474	Id.	
475	National Organization for Organ and Tissue Donation and Transplantation of Lebanon, "Historical Overview".	

of Health issued Ministerial Decree No. 1/509 of 1999. In 2002, the Ministry of Health established the National Organization for Organ and Tissue Donation and Transplantation of Lebanon (NOD-Lb) to ensure self-sufficiency by implementing and supervising the deceased organ donation system.⁴⁷⁶

The primary task of the NOD-Lb is to promote a unified organ procurement procedure across all medical institutions. The NOD-Lb aims to establish an official organ donation and transplantation registry, develop a central national laboratory for organ and tissue donation and transplantation, and raise public awareness of organ donation's importance. The NOD-Lb supervises the application of the Lebanese donation and transplantation system for organs, tissues, and human cells in Lebanese hospitals. The NOD-Lb is also responsible for the development of continuous education for health professionals and the promotion of organ and tissue donation to the general public.⁴⁷⁷

After the development of the NOD-Lb with the help of Spanish experts from the Donation and Transplantation Institute, Lebanon witnessed an increase in organ donation rates despite some limitations due to political and security instability.⁴⁷⁸ Lebanon has a population size of around 5.5 million. The donation rate in 2003 for living donation was 20 pmp and for deceased donation 2.5 pmp. From 2003 to 2018, the living donor rate was between 16.5 and 25.5 pmp, and the deceased-donor rate was between 0 and 2.8 pmp. Figures since 2018 are not yet available.⁴⁷⁹

Organ transplants in Lebanon are predominantly living kidney organ donations. Other kinds of organ transplant are rarely performed. Transplantation from related living or deceased donors is the most frequently performed transplantation, followed by transplantation using unrelated living donors. Many factors hinder the growth of renal transplantation from cadavers, such as the lack of information in the population about brain death, lack of cooperation and coordination between hospitals, and lack of centralization of organ distribution. Another reason may be the worsening of Lebanon's overall economic and political conditions.⁴⁸⁰ Lebanon, along with other states in this region, is undergoing a crisis that makes improving organ transplantation challenging. The World Bank has stated that Lebanon's crisis is due to Lebanese

⁴⁷⁶ National Organization for Organ and Tissue Donation and Transplantation of Lebanon, "Historical Overview."
477 National Organization for Organ and Tissue Donation and Transplantation of Lebanon, "Main Objective".
478 Jad A. Degheili et al., "Cadaveric Organ Donation in Lebanon: Proposed Suggestions for Improvement," *Transplantation Proceedings* 52, no. 1 (2020): 39.
479 International Registry in Organ Donation and Transplantation, "Lebanon".

⁴⁸⁰ Degheili et al., "Cadaveric Organ Donation in Lebanon," 39.

leaders' mismanagement and lack of adequate policy actions and has ranked the country among the top three most severe global financial crises since the mid-nineteenth century. The economic crisis has had a devastating impact on the healthcare sector. Medicines and medical supplies, most of which are imported, are in short supply. Recent fuel and electricity shortages in the country have pushed hospitals to their worst state, with hospitals permanently closing or warning that they will be forced to cease operations, threatening the lives of hundreds.⁴⁸¹

4.2 Regulations

Decree Law No. 109 of 1983 on the Removal of Human Tissues and Organs for Therapeutic and Scientific Purposes⁴⁸² and Regulatory Decree No. 1442 of 1984 implementing Law No. 109 regulate organ transplantation.⁴⁸³ Law No. 109 establishes the requirements for living donation. The donor must be at least 18 years of age. Prior to the operation, the donor must undergo a medical examination. The physician performing the examination must inform the donor of the consequences and risks of the removal and must ensure that the donor has adequately understood the information. The donor must consent to the organ donation freely and in writing. Art. 1 also regulates that no form of compensation shall be provided to the donor for the donation of the organ and that organs may not be removed if this presents any risk to the donor's health.

Deceased-donor organ transplantation for therapeutic or scientific purposes is also permitted on condition that the deceased has expressed consent in a will or another officially recognized document and that members of the family of the deceased have given consent in order of priority starting from the spouse, the children ranked according to age, the father, and ending with the mother. In the absence of these relatives, the physician in charge of the hospital department is to give consent. Other family members than those mentioned cannot provide consent (Art. 2). The medical criteria for brain death are regulated in Decree No. 1442 of 1984, which implements the Provisions of Decree Law No. 109 of 1983. Consent must also be given by the recipient of the transplant (Art. 3). Art. 7 regulates the penalties for the violation of this law.

The allocation criteria for living and deceased donations are regulated by the NOD-Lb in a document published in 2016. The document states that distri-

⁴⁸¹ World Bank Group Middle East and North Africa Region, "Lebanon Economic Monitor: Lebanon Sinking (To the Top 3)" xi.

⁴⁸² Decree Law No. 109 of 1983 on the Removal of Human Tissues and Organs for Therapeutic and Scientific Purposes.

⁴⁸³ Regulatory Decree No. 1442 of 1984 Implementing the Decree Law No. 109 of 1983.

bution rules apply to all organs: kidneys, heart, liver, pancreas, lungs, heart, and the intestines, corneas, and other tissues. The waiting list is national and managed by the NOD-Lb, and all patients needing an organ must be registered. Lebanese citizens and foreigners who have lived in Lebanon for more than four years can be registered. All living and deceased donors must be reported to the NOD-Lb. The document also states that the final decision to transplant an allocated graft is the responsibility of the medico-surgical team. Allocation occurs at two levels of distribution. local and national. The local level has overall priority, which means that the donating hospital has priority over another hospital. In exceptional cases of acute emergencies, however, a hospital at the national level can profit first. The document also regulates the detailed allocation criteria for each organ. The allocation criteria follow the internationally commonly accepted criteria, such as blood group compatibility, time spent on the waiting list, age gap between recipient and donor, medical status, and the MELD (Model for End-Stage Liver Disease)/PELD (Model for Paediatric End-Stage Liver Disease) score, for assessing the prognosis of chronic liver disease.

4.3 Assessment

Lebanon's law does not fully fulfil the religious-legal criteria expressed in fatwas. The law does not reiterate the most important criterion in Islamic law which is that living and organ donation is only permitted if it saves the life of another person. However, for living donation the law refesr to the criteria that organ transplantation must not harm the life or well-being of the donor in a serious way, which is also expressed in fatwas. For deceased donation, the law accords with the majority opinion expressed by Muslim legal scholars that the death criteria are to be determined by medical specialists.

Lebanon's regulations largely conform with the *WHO Guiding Principles*. Lebanese law adheres to Principle 4, which permits organ removal from living minors only in exceptional cases to be determined by the national law. In Lebanon, organ transplantation for minors is legally pohibited. Principle 5 is also respected because Syria prohibits all forms of monetary compensation for organ donation.

Principle 1 of the WHO Guiding Principles permits deceased donation when any consent is obtained from the organ donor. At minimum, the WHO Guiding Principles require that there is no reason to believe that the deceased person objected to such removal during their lifetime. The organ transplantation regulation in Lebanon requires deceased donation consent from the deceased during lifetime and the consent of the next of kin. Therefore, Principle 1 is respected. The law in Lebanon also requires informed consent prior to living donation. This regulation fulfils Principle 3, which states that living donors must give informed consent and donate freely without coercion. Principle 3 also favours genetically, legally, or emotionally related living donation. However, Lebanon's regulation does not restrict living donation to related living donation. Therefore, Principle 3 is not entirely respected.

Principle 9 states that the allocation of organs should be guided by clinical criteria and ethical norms and not financial or other considerations. Principle 9 also requires allocation rules to be defined by appropriately constituted committees and to be equitable, externally justified, and transparent. The law in Lebanon does not address the question of allocation. However, the committee designated by law as responsible for organ transplants has published a document on allocation criteria that fulfil the requirements of Principle 9.

5. Iran

5.1 In General

The first kidney transplant in Iran was performed in 1967. The Ministry of Health and Medical Education established the first dialysis centre seven years later. Until 1984, the Ministry of Health regularly sent patients to other countries for renal transplants due to a lack of medical equipment and specialized physicians.⁴⁸⁴ This changed in the 1980s when renal transplantation teams formed in Iran and began performing living related donor renal transplant surgeries regularly.⁴⁸⁵ From the beginning of renal transplantation until 1985, 112 renal transplants took place.⁴⁸⁶ This number doubled in the period from 1985 to 1987, when 274 renal transplantations were performed.⁴⁸⁷ The first living unrelated renal transplant surgery in Iran–and for that matter, in the Middle East–took place in January 1987.⁴⁸⁸

In 1988, many patients with end-stage renal disease needed renal transplants. Evidently, there were not enough living donors to meet the need. Iran also had not yet legalized deceased-donor transplants because early religious interpretations had cast doubt on whether such operations on deceased pa-

⁴⁸⁴ Nasser Simforoosh et al., "Living Unrelated Kidney Transplantation: Does It Prevent Deceased-Donor Kidney Transplantation Growth?," *Experimental and Clinical Transplantation* 17, Suppl 1 (2019): 251.

⁴⁸⁵ Kiarash Aramesh, "Iran's Experience on Living and Brain-Dead Organ Donation: A Critical Review," in Organ Transplantation in Times of Donor Shortage: Challenges and Solutions, ed. Ralf J. Jox, Galia Assadi and Georg Marckman (Cham: Springer, 2016), 286.

⁴⁸⁶ Mitra Mahdavi-Mazdeh, "The Iranian Model of Living Renal Transplantation," *Kidney international* 82, no. 6 (2012): 627.

⁴⁸⁷ Mahdavi-Mazdeh, "The Iranian Model of Living Renal Transplantation," 628.

⁴⁸⁸ Simforoosh et al., "Living Unrelated Kidney Transplantation," 251.

tients were permissible in Islam. This situation resulted in a long waiting list of patients who wanted to travel abroad using government support for kidney transplants. The financial burden and the deficiency of dialysis facilities and transplant centres caused by economic sanctions during the Iran-Iraq war (1980-1988) led to a permanent shift to living-unrelated renal transplantation to meet the need for organs.⁴⁸⁹ This was facilitated by the fatwas of religious authorities that allowed the establishment of a compensated, living-unrelated renal donor transplantation programme, which was named the Iranian model of kidney transplantation.⁴⁹⁰

In the Iranian living-unrelated renal transplant programme, the patient is referred to the Dialysis and Transplant Patients Association (DATPA). This charitable organization arranges medical evaluation and referral to transplant centres when the patient has no living related donor. The DATPA locates a suitable living unrelated donor for the patient. The potential living unrelated donors contact the DATPA by themselves. There is no role for a broker or an agency in this programme. All renal transplant teams belong to university hospitals, and the government funds all the hospital expenses of renal transplantats. After a renal transplant, the living-unrelated donor receives a monetary reward called a 'gift for altruism' and health insurance from the government. Usually, living unrelated donors also receive a 'rewarding gift' of monetary value from the recipient.491 The negotiation between the donor and the recipient concerning the rewarding gift takes place at the association, where private space is provided for them, and they meet face to face. The association does not keep records of the amounts agreed for rewarding gifts and has no role in the exchange process. However, the association maintains some control over the issue by introducing another potential donor to the recipient if a donor asks for an unusual amount of money. A donor may also be omitted from the list of potential donors.⁴⁹² After the operation, the donor presents the transplantation documents to the designated charity office, called the Charity Foundation for Special Diseases (CFSD). The CFSD is in charge of distributing the governmental 'gift of altruism' and health insurance. 493 Charitable organizations

492 Mahdavi-Mazdeh, "The Iranian Model of Living Renal Transplantation," 629.

493 Simforoosh et al., "Living Unrelated Kidney Transplantation," 292-293.

⁴⁸⁹ Simforoosh et al., "Living Unrelated Kidney Transplantation," 251; Aramesh, "Iran's Experience," 286.

⁴⁹⁰ Kiarash Aramesh, "The Ownership of Human Body: An Islamic Perspective," Journal of Medical Ethics and History of Medicine 2, no. 4 (2009): 3.

⁴⁹¹ Ahad J. Ghods and Mitra Mahdavi, "Organ Transplantation in Iran," Saudi Journal of Kidney Diseases and Transplantation 18, no. 4 (2007): 650-651.

are also very active in providing subsidized immunosuppressive drugs and in funding any expenses of renal transplants to poor patients.⁴⁹⁴

Strict ethical standards are in place for kidney transplants in Iran, and the transplant teams and the Iranian Society for Organ Transplantation monitor all procedures closely. Foreign nationals are not allowed to donate kidneys to Iranian recipients or receive a transplant in Iran unless the donor and recipient are of the same nationality. Authorization is required from the Center for Management of Transplantation at the Ministry of Health.⁴⁹⁵

To ensure safety, potential recipients and donors must be evaluated with clinical and psychological tests and imaging. The European Best Practice Guidelines for Renal Transplantation and the Amsterdam Forum on the Care of the Live Kidney Donor Medical Guidelines are used for this purpose.⁴⁹⁶ From 1986 to 2000, voluntary consent for all living kidney donors was assessed by the Donor Selection Panel, which consisted of nephrologists, transplant surgeons and members of nursing staff, to exclude the possibility of coercion of kidney donors. Since 2000, the evaluation and selection of potential donors and recipients have been carried out independently, first by transplant nephrologists, then by members of the surgical team.⁴⁹⁷

As mentioned, the living related and unrelated donor programme became only possible with religious scholars' approval. In contrast to Arab states, the religious scholars in Iran are of the Shia belief because most of the Iranian population belongs to the Shia branch of Islam. Islamic jurisprudence differs between the two branches. In Shia Islam, the hierarchy of legal authority is stricter than in Sunni Islam. In general, a *mujtahid*, a legal scholar, who has proven himself to be capable of *ijtihād* (independent reasoning) has the authority to issue fatwas. Among the *mujtahid* of Shia Islam, a *marjaʿal-taqlīd* ('model' or 'source of imitation') emerges. The *marjaʿ* is considered a high-ranking Shia scholar whose fatwas can be followed by lay Shiites. Only a living *marja*' can be followed.⁴⁹⁸ At present, there are multiple *marjaʿs*.⁴⁹⁹ The standing and influence of a *marjaʿ* depend on how many followers he has. Every Shiite should choose one authority whose fatwas they will follow in all matters. The influence and following of each *marjaʿ* varies geographically. In Iran, the current supreme

⁴⁹⁴ Ghods and Mahdavi, "Organ Transplantation in Iran," 651.
495 Ghods and Mahdavi, "Organ Transplantation in Iran," 651.

⁴⁹⁶ Ghods and Mahdavi, "Organ Transplantation in Iran," 651.

⁴⁹⁶ Gilous and Mandavi, Organ Transplantation in Iran, 651.

⁴⁹⁷ Ghods and Mahdavi, "Organ Transplantation in Iran," 652.

⁴⁹⁸ Walbridge, "Introduction," 4.

⁴⁹⁹ Walbridge, "Introduction," 3ff.

leader, Ayatollah Khamenei, is a *marja*' with an eminent position since he is not only a religious leader but also a political one. The same applies to the late supreme leader of the Islamic Republic of Iran, Khomeini, who is still followed even though he technically can no longer be followed according to Shia doctrine since he is dead.⁵⁰⁰

Although Shia scholars differ from Sunni scholars, the opinions expressed in fatwas on organ transplantation are basically the same. Like most Sunni scholars, Shia authorities opine that both living and deceased donations are permitted. Fatwas permitting living compensated living donations were given, for example by Ayatollah Sistānī, one of the significant marja' of the Shia community in Iraq. He issued a fatwa permitting organ donation and transplant in situations that do not threaten the donor. In his fatwa, he ddistinguishes 'minor organs', which are considered to be any tissue that can regenerate, such as blood, marrow, skin, portions of the liver, and one kidney since the human being can live with one kidney, from 'major organs': organs that cannot regenerate and the loss of which would be detrimental to the health of the donor. Avatollah Sistānī allows the donation of minor organs because this act does not endanger the donor's life. Additionally, Ayatollah Sistānī requires donors to be of age and sane and have given consent to the procedure. Ayatollah Sistānī opines that receiving monetary compensation for the organ is also permissible in such cases. He, however, stops short of calling the transaction an 'aqd albay'(a contract of sale) classifying it as a 'donation' instead. His fatwa only notes that when the organ donation itself is permissible, receiving compensation for it is also permissible.501

Iran currently has no comprehensive law to regulate living kidney donation. The current regime is based on ordinances and not statutes.⁵⁰² The latest reform occurred in 2019, when the Ministry of Health and Medical Education passed an Executive Order to prevent illegal bargaining and ensure payments to donors. The new order requires all potential donors and recipients to be registered through an online system. It prohibits the introduction of a patient to a living donor until the transplant management office has designated and matched them. Furthermore, payments must occur through the Iranian Population and Kidney Foundation (IPKF), which is under the official authority and supervision of the Ministry of Interiors.⁵⁰³ Additionally, the order reinforced

500	Walbridge, "Introduction," 11.	
501	Ali Sistani, "Fatwas Related to Organ Donations and Organ Transplants".	
502	Takhshid, "Kidney, Money, and the Shī'ah Implementation," 87.	
503	Executive Order on Organ Transplantation From Living Donors in Authorized Hospitals, Iran (2019); Takhshid, "Kidney, Money, and the Shī'ah Implementation," 89.	

the pre-existing ban on private hospitals from performing kidney transplants and reaffirmed the mandate that only designated public hospitals are allowed to conduct the procedure.⁵⁰⁴

Khomeini, the late Supreme Leader of Iran, gave a fatwa permitting deceased donation in 1989.⁵⁰⁵ In this fatwa, he opined that it is permitted to remove organs from a dead body if only an organ transplant can save the life of a Muslim. However, the deceased donor must have permitted it during lifetime; if there is no permission, the parents cannot provide consent after death.⁵⁰⁶ His successor, Khamenei, who is also a high-ranking Shia legal scholar, adopted this view in his fatwa on deceased organ donation. Khamenei stated that it is generally obligatory to sell or donate an organ if the life of another Muslim can be saved by an organ transplant. This principle includes deceased donation after brain death with the prior permission of the deceased.⁵⁰⁷

In 1995, the parliament attempted to enact a law on deceased organ donation. However, this law was first blocked by the Guardian Council, the government body responsible for ensuring that any law passed by the parliament is in accordance with Islam and the Iranian Constitution. The law was finally enacted in 2000 after the Guardian Council failed to respond to the law's compliance by the official deadline. According to the Iranian Constitution, if the Guardian Council does not respond within ten days to the legality of a bill, the bill automatically becomes enforceable as law.⁵⁰⁸ In 2000, the Iranian parliament enacted the Organ Transplantation and Brain Death Act, which officially regulates organ transplants from deceased patients declared brain dead.⁵⁰⁹ It must be noted that the first deceased organ donation was performed in 1996, a year after the law was first rejected. This was only possible because Khamenei had already issued a fatwa permitting deceased organ donation.⁵¹⁰

Since 2015, ID cards have been issued by the Ministry of Health to those who wish to become a deceased donor through an online registration tool.⁵¹¹ However, this procedure has its own limitations. According to the Organ Trans-

504	$\label{eq:constraint} Executive Order on Organ Transplantation From Living Donors in Authorized Hospitals.$	
505	Simforoosh et al., "Living Unrelated Kidney Transplantation," 251.	
506	Ruhollah Khomeini, "Fatwa on Organ Transplantation".	
507	Ali Khamenei, "Diagnosis of Death and Organ Transplantation," accessed February 9, 2023, https://farsi.khamenei.ir/treatise-index.	
508	Takhshid, "Kidney, Money, and the Shī'ah Implementation," 87; Thomas Eich, "Organ- transplantation und Organhandel im Iran," in <i>Kommerzialisierung Des Menschlichen</i> <i>Körpers</i> , ed. Jochen Taupitz (Berlin, Heidelberg: Springer, 2007), 309.	
509	Organ Transplantation and Brain Death Act, Iran (2000).	
510	Behrooz Broumand, "Living Donors: The Iran Experience," <i>Nephrology, Dialysis, Transplantation</i> 12, no. 9 (1997): 1831.	

511 Iranian Society of Organ Donation, "The Importance of Organ Donation ID".

plantation and Brain Death Act, the ID card is not a legally binding will; it can only serve as corroborating evidence in the procedure.⁵¹²

Iran has continuously had relatively high living and deceased donation rates. The high living donation rate is a result of the governmental and private monetary compensation for the donation. In 1996, the government set the amount for the governmental 'gift of altruism' at 10 million Iranian Rial, which doubled the usual amount for a kidney. As a result of the state's price increase for kidneys, the willingness of the population to donate increased drastically: from 750 donations in 1996 to 1150 in the following year.⁵¹³ However, the governmental reward soon lost value under high inflation and became insufficient.⁵¹⁴ In the year of the introduction of the governmental 'reward' of 10 million Iranian Rial, the amount corresponded to around 5,500 US Dollars.⁵¹⁵ Today, the value is only around 200 US Dollars.

Accordingly, the rate for living donation has decreased drastically.⁵¹⁶ For 2021, the living donor rate is 8.80 pmp. Iran ranks seventh in the African and Mediterranean region from a total of 14 countries that have published figures.⁵¹⁷ Ten years before, in 2011, the living donor rate was 20.30 pmp; twenty years before, in 2001, the rate was 23 pmp. Iran currently has a population of around 88 million.⁵¹⁸

In contrast, the deceased donation rate had increased since 2000 when the Organ Transplantation and Brain Death Act was enacted. In 2006, the deceased-donor rate was 1.80 pmp. Six years later, the rate had increased to 6.90 pmp. Since 2015, the deceased-donor rate has not fallen below 10.0 pmp except for the year of the Covid pandemic in 2020.⁵¹⁹ In 2021, the Iranian deceased-donor rate was 11.50 pmp. Iran ranks first in the African and Mediterranean region. In comparison, the state with the second highest rate in this region, Kuwait, has a rate of 5.80 pmp.⁵²⁰

512	<i>Organ Transplantation and Brain Death Act</i> ; Iranian Society of Organ Donation, "The Importance of Organ Donation ID."
513	Eich, "Organtransplantation und Organhandel im Iran," 310-311.
514	Sigrid Fry-Revere, <i>The Kidney Sellers: A Journey of Discovery in Iran</i> (Durham: Carolina Academic Press, 2014), 83.
515	Javad Zargooshi, "Iranian Kidney Donors: Motivations and Relations with Recipients," <i>The Journal of Urology</i> 165, no. 2 (2001): 388.
516	International Registry in Organ Donation and Transplantation, "Iran".
517	International Registry in Organ Donation and Transplantation, "Final Numbers 2021," 4,7.
518	International Registry in Organ Donation and Transplantation, "Iran."
519	International Registry in Organ Donation and Transplantation, "Iran."
520	International Registry in Organ Donation and Transplantation, "Final Numbers

520 International Registry in Organ Donation and Transplantation, "Final Numbers 2021," 9.

Currently, the deceased-donor rate in Iran is higher than the living donor rate, which is a welcome fact because this means that fewer commercial unrelated living donations are performed. The Iranian Society of Organ Donation reports a waiting list for kidney, heart, lung, pancreas, and liver organs and that the time spent on the list varies from a few days to some years. Furthermore, the Iranian Society of Organ Donation states that 10-25% of people on the waiting list die per year waiting for an organ.⁵²¹ Statements by physicians indicate that the waiting time for kidneys has extended to two years when formerly it was two to three months.⁵²² The system of compensated unrelated living donations has been criticized for ethical reasons. Critics have raised the concern that commercial donation clashes with the requirement of free consent because monetary motives thwart the element of voluntariness in organ donation. Studies conducted around the turn of the last millennium show that unrelatedliving donors agreed to donate their organs for primarily monetary reasons to overcome financial hardship.523 Studies have concluded that under these circumstances donation cannot be considered free.524

5.2 Regulations

The Organ Donation and Brain Death Act of 2000 regulates deceased donation. Art. 1 states that organs from a brain-dead donor can be transplanted when a patient's survival depends on the organ's reception on condition that the deceased has expressed their consent in a will or the consent of the deceased's next of kin is obtained. Art. 1 also states that brain death must be confirmed according to Islamic legal scholars' opinion. The Act prescribes that brain death must be diagnosed by public hospitals authorized by the Ministry of Health, Medicine and Education and that the physicians diagnosing brain death cannot take part in the transplant. The Executive Regulation of the Organ Donation and Brain Death Act of 2002 defines brain death (see Art. 1). It also details the specialities of the physicians authorized to determine brain death in a patient

⁵²¹ Iranian Society of Organ Donation, "Frequently Asked Questions [In Persian]".

⁵²² n.a., "The Enduring Face of Kidney Transplant Surgery: The Waiting Time Has Increased from Two Months to Two Years [In Persian]," *Khabarban*.

⁵²³ See Sigrid Fry-Revere et al., "Coercion, Dissatisfaction, and Social Stigma: An Ethnographic Study of Compensated Living Kidney Donation in Iran," *International Urology and Nephrology* 52 (2020); Zargooshi, "Iranian Kidney Donors"; Alireza Bagheri, "Compensated Kidney Donation: An Ethical Rview of the Iranian Mdel," *Kennedy Institute of Ethics Journal* 16, no. 3 (2006).

⁵²⁴ Fry-Revere et al., "Coercion, Dissatisfaction, and Social Stigma," 2409; Gabriel M. Danovitch, "The High Cost of Organ Transplant Commercialism," *Kidney international*, no. 85 (2014): 249; Javad Zargooshi, "Quality of Life of Iranian Kidney Donors," *The Journal of Urology*, no. 166 (2001): 1796, 1799ff.

(Art. 2) and the formalities of brain death diagnosis by the physicians (Art. 4 and 5). The Executive Regulation also determines administrative rules for recording brain death cases. Art. 5 requires consent to deceased donation to be expressed in a written or oral will (Art. 6). Art. 7 determines who the next of kin are: they are the deceased's heirs. Art. 7 also states that all heirs must consent.

5.3 Assessment

The Organ Donation and Brain Death Act of 2000⁵²⁵ fulfils the criteria established by the fatwas of the high-ranking Shia scholars. According to Islamic legal opinion, deceased donation is permitted if it saves another person's life. This is prescribed in Art. 1 of the Act. Fatwas have also directed that the deceased must have consented during their lifetime. The fatwa by Khomeini even explicitly prohibits organ transplantation based solely on the family's consent when the deceased has not expressed their will during lifetime. The wording of the Organ Donation and Brain Death Act is unclear whether the family needs to act according to the presumed will of the deceased or whether the family can give consent instead of the deceased. Tarivardi states that the Provision in the Act is interpreted as the requirement for the next of kin to act according to the deceased's presumed will and that the next of kin cannot override the deceased's will. This understanding is in line with the opinion expressed in fatwas that organ transplantation is allowed on condition that the deceased has given consent for it.⁵²⁶

Deceased donation, as regulated by the Organ Donation and Brain Death Act, also fulfils the criteria set by the *WHO Guiding Principles*. Principle 1 permits deceased donation when any consent is obtained from the organ donor. As a minimum requirement for deceased-donor organ transplantation, Principle 1 requires 'that there is no reason to believe that the deceased person objected to such removal'. The Iranian regulation requires the deceased's consent. According to the common interpretation of the Organ Donation and Brain Death Act, the next of kin must consent while respecting the deceased's presumed will if the deceased has not left a written will. Because the next of kin cannot override the deceased's will, Principle 1 is respected. The Act also fulfils the Principle 2, which states that the physician determining death should not be directly involved in the transplant. The exact requirement is regulated in Iran's law.

525 Organ Transplantation and Brain Death Act.

⁵²⁶ Sadeq Tarivardi, Mohammd H. Sadeqi, and Mahmud Abbasi, "The Need to Monitor the Rules and Regulations of Organ Donation in the Iranial Legal System [In Persian]," *Medical Law Journal* 15, no. 56 (2021): 4.

Iran has no law on living organ transplantation. The current regime is based on ordinances and best practices of medical societies without legal force. Therefore, an assessment in light of Islamic law and the WHO Guiding Principles is difficult to make. According to Islamic legal opinion, living donation is permitted for organs that can be removed without endangering the donor's life and on condition that another person's survival depends on receiving the organ. If needed, organ transplantation is permitted, and it does not matter whether there is compensation. According to some Shia scholars, the compensation for the organ is not seen legally part of a sales contract because a person cannot own their body or parts of it. The sale of the organ is, therefore, not permitted. The impermissibility of using a contract of sale to secure an organ does not equate impermissibility of receiving any form of compensation for giving up an organ. There are other legal ways that can legitimize a monetary transaction, such as an 'agd al-ji'āla (contract of reward). This contract is a contract of Shia legal jurisprudence, also enacted in Iran's Civil Code.527 The contract of reward is a form of unilateral contract that can be accepted by performance. The $j\bar{a}$ 'il (the offerer) states that they will award whoever undertakes a certain act. The contract is not binding until the *āmil* (the person who performs the act) has done the thing asked. Therefore, unlike an 'aqd al-bay' (contract of sale), which is a binding contract that can be legally enforced with monetary damages in case of a breach of contract, no one can be bound to perform an act, in this case, donating an organ under an 'aqd al-ji ala.528 In this sense, the Islamic legal opinions expressed by high-ranking Shia scholars are respected in the Iranian living organ transplantation model.

The monetary compensation breaches Principle 5 of the *WHO Guiding Principles*. This requires organs to be donated freely without any monetary reward and prohibits purchasing or selling organs from living persons or the next of kin of deceased persons. The commentary to Principle 5 explicitly states that 'national law should ensure that any gifts or rewards are not, in fact, disguised forms of payment for donated cells, tissues or organs' and that 'incentives in the form of 'rewards' with monetary value that can be transferred to third parties are not different from monetary payments'. Even if under Iranian law an organ cannot be a subject of a sales contract and, therefore, cannot be sold, money is transferred between the donor and the recipient. Principle 5 is not respected in the Iranian organ transplantation regime. Because monetary compensation is given to the donor, it is questionable whether the requirement established in Principle 3 of informed and voluntary consent can

528 Ali A. Hayati, "Legal Basis of Organ Donations and Transplants [In Persian]".

⁵²⁷ Civil Code, Iran at Art. 561-570 (1928).

be fulfilled. The Iranian living organ transplantation model ensures that informed and voluntary consent is given. However, it is unclear how the consent evaluation team assesses the financial motives of a donor for voluntariness. Is voluntariness still given when a donor is driven by financial motives?

The Iranian living organ transplantation model is ethically problematic in light of the *WHO Guiding Principles* because it does not fulfil the basic ethical standards of donation without compensation and free and informed consent. What is even more problematic is the lack of legal regulation of living organ transplantation since this lack does not allow an assessment of the legal situation in Iran.

IV. Northern Africa

- 1. Egypt
- 1.1 In General

Kidney transplantation started in Egypt about 43 years ago when the first transplant was performed in March 1976. Cadaveric transplantation was performed twice in Egypt in 1992 from two convicted criminals after their executions in Alexandria. This elicited social anger and rejection, which led to legal restrictions on non-living organ procurement at that time.⁵²⁹ Living organ transplantation continued to establish itself as a medical treatment. About 10,000 transplants were performed from 1976 to 2011, and the annual mean number of kidney transplants between 2011 and 2016 increased to 1,100 cases yearly. The number of transplant centres has also grown from 12 in 1997 to 35 currently licensed centres in 2020.⁵³⁰

Although many living organs are transplanted, efforts to initiate a national organ transplant programme failed. Legislators continue to disagree about how best to oversee this new medical treatment. The debate among legislators and physicians spilt over into the public domain in the late 1980s, when the mass media began to uncover disturbing stories about the exploitation of poor organ sellers and the uncertain outcomes for transplant recipients.⁵³¹ Aside from kidneys and liver lobes, corneas have also been transplanted in Egypt, beginning as early as the 1960s. These transplants have involved taking corneas from corpses' eyes in public morgues to transplant into patients blinded by cornea opacity. All these transplants occurred in Egypt's major cities for over three

⁵²⁹ Bakr, Elmowafy and Abbas, "History of Renal Transplantation," 208.

⁵³⁰ Mohamed Elrggal et al., "The Journey of Kidney Transplantation in Egypt: Still Extra-Miles to Go," *Nephrology Dialysis Transplantation* 35, Supplement_3 (2020).

⁵³¹ Hamdy, Our Bodies Belong to God, 3.

decades without national or legal oversight. During the 1980s, private medical clinics began to proliferate well beyond the surveillance capabilities of the Ministry of Health, and it was in these unregulated clinics that the black market in body parts thrived.⁵³²

Around this time, all the official religious scholars in Egypt declared organ donation permissible in Islam. However, Shaykh Shaʻrawī, a popular television figure, created a stir in 1988 when he stated that a person could not donate a kidney since these do not belong to human beings. Shaʻrawī was a widely admired figure known for his charismatic appearances on his weekly Quranic television programs from the 1970s until he died in 1998. Shaʻrawī's absolutism heightened the controversy and deepened divisions between opponents and proponents of a national organ donation programme.⁵³³

The Egyptian media has published a steady stream of reports on organ thefts and trafficking since the 1980s. For decades, Egyptian critics, journalists, physicians, and religious scholars have described the exploitation of people experiencing poverty in organ donation, a practice that has been routinely ignored and denied. Only when the international media began focusing on Egypt as a 'trafficking hotspot' of the world, including reports from various United Nations agencies, did the Egyptian government feel pressured to act. The UN reports argue that poverty—not criminality or greed—and lack of governmental oversight fuel organ sales.⁵³⁴

President Mubarak reopened the topic in his November 2008 address to the Parliament, urging legislators to pass a national transplant law so that Egypt could join the ranks of Arab and Muslim nations that have long-established national transplant programmes.⁵³⁵ Under international pressure to pass a law, lawmakers pushed for the legal permissibility of cadaveric procurement from brain-dead patients to increase the number of organs available and were finally able to pass a law.⁵³⁶ In 2010, Egypt introduced the Transplantation of Human Organs and Tissues Act (Law 5/2010), which prohibits the sale or purchase of organs and allows deceased donation. The law was established following the Law of Trafficking in Persons (Law 64/2010), which extends liability for organ sales to include trafficking offences.⁵³⁷ The law establishes The Higher Committee for Organ Transplants and is responsible for regulating

⁵³² Hamdy, Our Bodies Belong to God, 4.

⁵³³ Hamdy, Our Bodies Belong to God, 3.

⁵³⁴ Hamdy, Our Bodies Belong to God, 232.

⁵³⁵ Hamdy, Our Bodies Belong to God, 3.

⁵³⁶ Hamdy, Our Bodies Belong to God, 232.

⁵³⁷ Seán Columb, *Trading Life: Organ Trafficking, Illicit Networks, and Exploitation* (Stanford, Berlin, Boston: Stanford University Press, 2020), 8.

and supervising all organ and tissue transplant procedures in the country. The new law criminalizes organ trafficking and sets strict penalties for physicians, hospitals, and medical facilities performing illegal organ transplant procedures. In 2017, the legislation was further modified to make the penalties even harsher.⁵³⁸

The deceased transplant programme has not yet been implemented despite the new 2010 legislation setting the legal framework. 539 Plans to bring these Provisions into force were abandoned with the onset of the Arab Spring, which began in 2011. Furthermore, in this political climate, the policing of the organ trade was no longer a priority. Although a law prohibiting organ sales had been established and subsequently enacted into the Egyptian penal code, in practice, the trade was tacitly accepted as an unregulated market solution to the surplus demand for organs. Political indifference, particularly concerning the bodies of predominantly black migrant donors from Sudan and Ethiopia, facilitated the development of organ trading networks along ethnically stratified lines.⁵⁴⁰ In the first two decades of transplantation, organs were legitimately sourced from a relatively large pool of living unrelated donors due to lack of a legal prohibition of organ sales. In this climate, impoverished sellers under financial hardship would frequent hospitals and dialysis centres to negotiate a price for one of their kidneys directly with patients or their physicians.541 Although it was widely acknowledged that these agreements were commercial, the level of oversight involved in this bureaucratic procedure helped achieve a minimal 'ethical' standard, insofar as the transplants were carried out in legitimate hospitals by reputable surgeons. The medical outcomes were generally positive for both donors and recipients.⁵⁴² After the Arab Spring, this practice changed and developed into an organ trade run by organized criminal organizations.543 Today, a black market persists, despite regulation, fuelled by the high demand for organs, the considerable cost of donation procedures, and the minimal numbers of hospitals and staff trained in the procedure. For this reason, there are no official numbers available for organ transplants in Egypt.544

⁵³⁸ Elrggal et al., "The Journey of Kidney Transplantation."

⁵³⁹ Elrggal et al., "The Journey of Kidney Transplantation."

⁵⁴⁰ Columb, Trading Life, 4.

⁵⁴¹ See Hamdy, Our Bodies Belong to God.

⁵⁴² See Rashad S. Barsoum, "Trends in Unrelated-Donor Kidney Transplantation in the Developing World," *Pediatric Nephrology* 23, no. 11 (2008).

⁵⁴³ Columb, Trading Life, 28.

⁵⁴⁴ Kimberly Wilkens, "The True Cost of Selling Your Organs on Egypt's Illegal Black Market," *Journal of International Business and Law* 17, no. 2 (2018): 275.

1.2 Regulations

The governing law on organ transplantation in Egypt is Law No. 5 of 2010, called the Transplantation of Human Organs and Tissues Act.⁵⁴⁵ Art. 2 of Law No. 5 states that organs can only be transplanted when this is necessary to preserve the life of the recipient or to treat a severe disease and when the organ removal does not endanger the life of the donor. Furthermore, Art. 2 prohibits the transplantation of organs, tissues, or reproductive cells that may lead to a 'mixing of genealogy'.

The law prohibits transplants between Egyptian and non-Egyptian citizens except for spouses provided that they have been married for at least three years (Art. 3). Art. 4 provides that, except for donation between spouses described in Art. 3 and except for a donation in an urgent case, only related donation is permitted. In the case of urgent need, unrelated donation is permitted on the approval of a special committee. The law further states in Art. 5 that free consent in written form is necessary prior to living donation. Children and other legally incompetent persons cannot consent (Art. 5). Consent may be withdrawn at any time before organ removal (Art. 5). Art. 6 prohibits the sale and purchase of an organ. In addition, art. 6 prohibits the operating doctor from removing an organ if they had prior knowledge of the commercial nature of the donation.

Law No. 5 permits deceased donation when needed to preserve the recipient's life or treat a severe disease. Deceased donation is only permitted among Egyptian citizens and when the deceased has given consent during lifetime in a written will or other official paper (Art. 8). Death must be certified by a decision issued unanimously by a tripartite committee of specialists in neurosurgery, cardiovascular diseases or surgery, and anaesthesia (Art. 14). Art. 10 requires that a waiting list for patients in need of deceased organ donations be prepared according to the priority of entry and urgency and other medical rules and procedures determined by a committee. The same article explicitly states that a patient's inability to pay for transplant expenses is not an allocation criterion. The law in its Chapter 4 regulates penalties for breaches of this law (Art. 16ff.).

1.3 Assessment

Law No. 5 of 2020 could not have been enacted without the approval of religious scholars. Law No. 5 fulfils the criteria set by Islamic legal scholars. In line with religious legal opinion, Egypt's law permits living organ transplantation only when needed to save a life. Egypt's law also permits deceased donation follow-

ing Islamic rulings, which means that deceased donation is permitted on condition that it saves the recipient's life.

Egypt's law does not address the issue of brain death criteria. The majority of Islamic legal scholars have expressed the view that the death criteria are to be determined by medical societies and that brain death is a form of death. Egypt's law fulfils Islamic legal opinion by assigning the authority to certify that death has occurred to medical experts. Another interesting Provision is Art. 1 of Law No. 5, which prohibits the donation of any human parts that could lead to a 'mixing of genealogy'. This concern is rarely expressed in fatwas on organ donation but more often in fatwas on artificial reproductive assistance. Fatwas on this topic, in general, prohibit using artificial reproductive technologies if they could lead to a 'mixing of genealogy': to uncertainty over bloodlineage. According to Islamic law, reproduction can only occur in the framework provided by Islamic law. One principle of Islamic family law is that a child can only be legitimate when born in wedlock. Suspecting that some medicaltechnological procedures could lead to uncertainty about compliance with essential principles of Islamic law, Sunni Muslim scholars have prohibited such procedures.546 The Provision about the 'mixing of genealogy' shows that Islamic legal opinion has been incorporated in the law.

Law No. 5 of 2010 creates a legislative framework that meets the general guidelines established by the WHO and other major conventions following internationally recognized standards. Egyptian law adheres to Principle 4, which permits organ removal from living minors only in exceptional cases to be determined by the national law. In Egypt, organ transplantation from minors and legally incompetent persons is legally prohibited. Principle 5 is also respected because Egypt prohibits the sale and purchase of organs.

The law in Egypt also respects Principle 1 about organ transplantation from deceased donors. Principle 1 permits deceased donation when any consent is obtained from the organ donor. As a minimum requirement, the *WHO Guiding Principles* require that there is no reason to believe that the deceased person objected to such removal. The Egyptian organ transplantation law only permits deceased donation when consent from the deceased is obtained during lifetime. There is no regulation of cases in which the deceased's will has not been expressed during their lifetime. Specifically, the law does not permit the next of kin to consent instead of the deceased. Law No. 5 has also partly incorporated Principle 9 on organ allocation. Egyptian law states the criteria of organ allocation, which align with the criteria set by Principle 9.

⁵⁴⁶ See International Islamic Fiqh Academy, "Qirarāt al-dawra"; Clarke, *Islam and New Kinship*, 107.

However, the law does not fully adhere to Principle 3. Egyptian law requires consent for organ removal from a living person. However, it does not regulate whether the consent should be informed, for instance, by the prior Provision of information about the risks of organ donation or whether consent should be obtained without coercion; Egyptian law only requires written consent from the donor. However, Egyptian law fulfils Principle 3 on free and voluntary donation because the requirement of free will is also stipulated in the law. The question arises whether the will can be free if consent is not based on the information needed to make a will. Principle 3 further favours related donation, either genetically, legally, or emotionally. Egypt's law fulfils this criterion because living donation is generally only allowed from donors to recipients related by blood or marriage; only in the exceptional case of urgency is unrelated living donation allowed on the approval of a committee.

Egyptian law has not stipulated a rule equivalent to Principle 2. Principle 2 requires that the physicians determining brain death should not be involved in the organ removal operation.

2. Libya

2.1 In General

Kidney transplantation in Libya started in Tripoli in 1989.⁵⁴⁷ During the next seven years, only 63 transplants were performed. Due to the low number of transplants, the transplant programme was suspended entirely in 1996. With no possibility of obtaining an organ transplant in Libya, patients travelled abroad to Middle Eastern and European countries for living related and unrelated organ transplants and purchased living transplants. This continued until 2004, when a new kidney transplant programme started at the Tripoli Central Hospital. During the first year of this programme, 50 renal transplants from living donors were performed.⁵⁴⁸ Between 2004 and 2007, around 135 kidney transplants were successfully performed, all from living related donors.⁵⁴⁹

Like many other Arab countries, in 2011 Libya experienced widespread protests against the entrenched regime in the Arab Spring. Since then, Libya has suffered two civil wars and an international military invention followed by various interim regimes.⁵⁵⁰ The situation in Libya can be described as an

549 Elusta et al., "Living Related Donor Kidney Transplantation," 834.

550 Human Rights Watch, "Libya: Eventa of 2021".

⁵⁴⁷ Ahmed Elusta et al., "Living Related Donor Kidney Transplantation in Libya: A Single Center Experience," Saudi Journal of Kidney Diseases and Transplantation 19, no. 5 (2008): 834.

⁵⁴⁸ Ehtuish F. Ehtuish et al., "Kidney Transplantation in Libya: A North African and Middle Eastern Perspective," *Experimental and Clinical Transplantation* 4, no. 1 (2006): 425.

ongoing state of emergency: the towns and their infrastructure have been destroyed, and public services are scarcely available. Health services are only available to cover basic needs.⁵⁵¹

Official figures for organ transplantation activities in Libya are scarce.⁵⁵² Cadaveric transplants and transplants other than kidneys have yet to be performed in Libya. A study reports that 454 living related kidney donations were performed between 2010 and 2019.⁵⁵³ The International Registry for Organ Donation and Transplantation listed the figures for the years 2021 and 2022. The organ donor rate for living donation in 2021 was 2.10 pmp, and for 2022, the rate was 3.0 pmp, which is very low overall. Libya has currently a population of around 6.7 million.⁵⁵⁴

2.2 Regulations

Deceased-donor organ transplantation is regulated in Libya by Law No. 4 of 1982 Concerning the Permissibility of Autopsy and Deceased Organ Transplantation.⁵⁵⁵ The law allows organs to be transplanted from deceased persons provided that they expressed their consent while they were alive or that consent is granted by one of their relatives up to the fourth degree (Art. 2). The law also regulates that organ transplants may only be performed in a hospital by specialist physicians (Art. 2).

Executive Order No. 193 of 2007 on Law No. 4 of 1982⁵⁵⁶ regulates deceased donation in detail. Art. 3 of this Executive Order provides that organs from the deceased may only be transplanted for therapeutic or scientific purposes. The same provision states: all organs and tissues may be transplanted except for reproductive organs and tissues. The Executive Order No. 193 of 2007 confirms Art. 2 of Law No. 4 of 1982 (see Art. 7 and 11) and specifies in Art. 2 that the first degree of next of kin includes the deceased's parents, children, and spouse. The Executive Order further requires that the deceased's will to donate needs to be mentioned on the deceased's identity card (Art. 14).

551	WHO, "Joint External Evaluation of IHR Core Capacities of Libya (WHO/WHE/ CPI/2019.37): Mission Report of 9-15 July 2018".	
552	52 International Registry in Organ Donation and Transplantation, "Libya".	
553	Jamila Elamouri and Nada Fawaris, "Family Relations of Living-Related Kidney Donors in Tripoli, Libya," <i>Ibnosina Journal of Medicine and Biomedical Sciences</i> 12, no. 04 (2020): 296.	
554	International Registry in Organ Donation and Transplantation, "Libya."	
555	Law No. 4 of 1982 Concerning the Permissibility of Autopsy and Deceased Organ Transplantation, Libya.	
556	Executive Order No. 193 of 2007 on Law No. 4 of 1982 Concerning the Permissibility of	

⁵⁵⁶ Executive Order No. 193 of 2007 on Law No. 4 of 1982 Concerning the Permissibility of Autopsy and Deceased Organ Transplantation, Libya.

Art. 4 of the Executive Order defines death by stating that all brain functions must be disrupted entirely and that specialist doctors must confirm that the donor's death is irreversible. The diagnosis of death must be given according to specific procedures and examinations determined in the executive order's appendix (Art. 5). The Executive Order further specifies that the medical report of death must be given by a medical committee of physicians specializing in internal medicine, neurology, and anaesthesiology (Art. 6). According to Art. 9, it is forbidden to trade in or extort human organs.

Although the Law's title states the subject of regulation to be the permissibility of autopsy and deceased organ transplantation, the Executive Order provides some regulations on living organ donation. Art. 11 of the Executive Order prohibits the transfer of human organs without the prior consent of the donor. The Executive Order also regulates that the donor must be 18 years old and have full legal competence to be able to consent to the donation of non-single, i.e. kidney, and indivisible organs. Furthermore, Art. 16 requires the National Transplant Program for Organ Transplantation to establish a register that records living and deceased donations and issues cards of confirmation to living donors to acknowledge their donations and, in case of deceased donation to the deceased's families. There are no other laws in Libya regulating living organ donation.

2.3 Assessment

Libyan law on organ transplantation adheres to the Islamic legal requirements for deceased donation, although the language used in Libya's regulation differs from that used in the fatwas. The fatwas permit organ transplantation on condition of necessity, which means that the procedure needs to save the life or significantly improve the well-being of the recipient. Law No. 4 of 1982 and its executive order permit organ removal from the deceased only for therapeutic purposes, which means that organ transplantation must improve the recipient's health. Therefore, the condition of necessity set by Islamic legal scholars is fulfilled.

Islamic legal scholars have acknowledged brain death as a form of death and let medical experts determine the criteria of death. The Libyan regulations follow the legal opinion of Islamic scholars by accepting the death criteria formulated by medical societies. Another matter of importance to Islamic law is the question of reproductive organs and cells. According to the majority opinion of Islamic legal scholars, the 'mixing of genealogy' must be avoided to fulfil the *maqāsid al-sharī*'a (goals of sharia), which includes maintaining the clarity of blood relationships. According to Islamic family law, a child can only be legitimate when born in wedlock. Sunni Muslim scholars prohibit any medical-technological procedures that could lead to uncertainty about the legitimacy of the child. The provision prohibiting the transplantation of reproductive organs and tissues in Libya's regulations respects Islamic legal provisions expressed in fatwas on the issue of reproduction.⁵⁵⁷

The necessity criterion established in Islamic law is not explicitly a requirement in Libya's law for living organ transplantation. Therefore, Libya's regulation does not fulfil the necessity criterion expressed by Islamic legal scholars. However, Libya's regulation fulfils another critical aspect of Islamic legal opinion on organ transplantation. According to Islamic law, only renewable and non-single organs can be donated. Libya's regulation respects this requirement by stating that living donors cannot consent to donate single and nonrenewable organs.

First and foremost, Libyan Law No. 4 and its executive order are to be criticized for their lack of comprehensive regulation of living donations. Libya's Law No. 4 concerns autopsy and deceased-donor organ transplantation but also includes provisions on living organ transplantation. This inconsistency makes an assessment difficult. However, a cautious assessment leads to the conclusion that Principle 4 of the WHO Guiding Principles on organ donation is observed. Principle 4 permits organ removal from a living minor only in exceptional cases to be determined by national law. Libya's law does not permit minors under 18 to donate organs. However, the Libyan regulation does, not fully adhere to Principle 3 on informed consent. Libya's law implicitly requires consent for living donation. However, it is not regulated whether the consent should be informed and voluntary through, for instance, the prior provision of information about the risks of organ donation or that consent should be obtained without coercion, as required by Principle 3. Libya's regulation does not favour related donations as expressed in Principle 3 because the question of related or unrelated living donations is not addressed.

For deceased donation, Principle 1 of the *Guiding Principles* require consent to be determined by the national law and dismiss organ removal if the deceased has expressed reluctance to donate after death. Libya's regulation requires consent from the deceased during lifetime or the relatives' consent if the deceased did not leave a will. Because it is unclear whether the next of kin can overrule the deceased's reluctance to donate post mortem, it is unclear whether Principle 1 is observed. Another ambivalent issue is commercial organ transplantation. Principle 5 prohibits the sale and purchase of organs. Libya's

⁵⁵⁷ See International Islamic Fiqh Academy, "Qirarāt al-dawra"; Clarke, *Islam and New Kinship*, 107.

law states that organ trade is prohibited. However, it is unclear whether this prohibition only concerns deceased organ donation or living organ donation.

Lastly, Principle 9 establishes that organ allocation should be equitable, externally justified, and transparent. Because Libya's regulation does not address the allocation question, Principle 9 is not respected explicitly.

3. Tunisia

3.1 In General

Living related and deceased kidney transplants were performed for the first time in 1986. Transplants soon extended to other organs, including the heart, liver, and pancreas.⁵⁵⁸ Kidney transplants have become routine procedures. Law No. 91-22 regulating organ transplantation, including procurement from living and deceased donors according to the presumed consent principle, was passed in 1991. Although the law does not specify it, after a long debate, medical staff decided to limit living donors to blood relatives. This changed in 2000 when the medical community decided to extend procurement to emotionally related donors.⁵⁵⁹

In 1995, the National Centre for the Advancement of Organ Transplantation, supervised by the Tunisian Ministry of Health, was created after Law No. 95-49 was passed. It aims to promote the advancement of organ donation, supervise and coordinate organ activity in the country, and ensure adequate oversight, traceability, and surveillance.⁵⁶⁰

Official figures for organ transplants in Tunisia are available only until 2015. The data published by the National Centre for the Advancement of Organ Transplantation shows low numbers of renal transplants from deceased and living donors until unrelated living donations began to be practised from 2000 onwards. After 2011, the numbers declined.⁵⁶¹ Two lung transplants were performed in 2013 and 2014. Liver transplants were performed regularly until 2010. Between 2010 and 2015, four lungs were successfully transplanted. The National Centre for the Advancement of Organ Transplantation has no figures on heart transplants.⁵⁶² Another source, however, reports that from 1993, when the first

⁵⁵⁸ Aziz El Matri and Taieb Ben Abdallah, "Organ Transplantation in Tunisia," *Experimental and Clinical Transplantation* 13 Suppl 1 (2015): 33.

⁵⁵⁹ El Matri and Ben Abdallah, "Organ Transplantation in Tunisia," 34.

⁵⁶⁰ El Matri and Ben Abdallah, "Organ Transplantation in Tunisia," 34.

⁵⁶¹ Centre National pour la Promotion de la Transplantation d'Organes, "Rapport D'activités 2014-2015".

⁵⁶² Centre National pour la Promotion de la Transplantation d'Organes, "Rapport d'activités 2014-2015," 20.

heart was transplanted, to 2004, 16 heart transplants were performed. Tunisia has a population of around 12.2 million.⁵⁶³

The figures show that organ transplantation in Tunisia increased until 2011, when the first protests of the Arab Spring started. Tunisia experienced a thorough democratization process for the next few years, which was accompanied by political uncertainty due to constant government turnover and lingering economic hardship.⁵⁶⁴ It seems that in the last decade, the focus in health care has shifted. Organ transplantation is no longer a priority since no figures on transplant activities are available from 2015 onwards.

3.2 Regulations

In Tunisia, Law No. 91-22 of 1991⁵⁶⁵ stipulates in Art. 4 that removing a vital organ, an organ whose removal would inevitably lead to death, is prohibited. Art. 2 regulates that living organ donors must be of age and enjoy their full mental faculties and legal competence. Consent must be given freely after receiving written information about all foreseeable physical and psychological consequences, possible repercussions for the donor's personal, family, and professional life, and all results expected from the organ transplantation (Art. 2 and 7). Consent must be expressed before the president of the court of first instance. The judge must ensure that the consent is given under the conditions stipulated by the law (Art. 8). Art. 9 states that the donor may withdraw consent before the organ removal.

Art. 3 states that deceased donors must be adults who did not oppose donating their organs during their lifetimes and whose family members do not oppose such donation after their deaths. The removal of organs for transplants from deceased minors or persons without legal competence is only permitted with the consent of their legal guardians. Art. 10 provides that any person can deposit their refusal to donate their organs at a court of first instance. The court is required to inform all hospitals authorized to perform organ transplants.

The law further stipulates the conditions for establishing death. According to Art. 15, organs may only be removed from a deceased person after death has been established by two physicians who are not part of the organ transplant team and following the rules commonly accepted and used in medical societies. Art. 15 requires that the Ministry of Public Health establish the criteria

563	El Matri and Ben Abdallah	, "Organ Transplantation in Tunisia," 35.	
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564 Sarah Yerkes and Nesrine Mbarek, "After Ten Years of Progress: How Far Has Tunisia Really Come?," January 14, 2021.

⁵⁶⁵ Law No. 91-22 of 1991 on the Removal and Transplantation of Human Organs, Tunisia.

for death, particularly the cessation of cerebral functions. In 1999, Decree No. 99-743⁵⁶⁶ was issued, in which the Minister of Public Health established the criteria for death. Art. 2 of Decree No. 99-743 defines death as the irreversible arrest of the cardiocirculatory function or the irreversible cessation of all encephalic functions. The law further defines the criteria for encephalic death (Art. 3) and provides the formalities for the certification of death (Art. 5).

Law No. 91-22 of 1991 prohibits the transplantation of reproductive organs from both living and deceased donation that bear 'genetic characteristics' (Art. 5). Furthermore, any monetary transaction for an organ transplant is prohibited except for reimbursement of direct expenses caused by the procedure (Art. 6). Chapter 3 of the law provides the punishments for violations of this law.

Provisions detailing the practical procedures for removing organs and tissues and their preservation, transportation, distribution, allocation, and transplantation are regulated in an order of the Minister of Public Health of 2004. The order of 2004⁵⁶⁷ provides that the rules of allocation are to be established by the scientific council of the National Center for the Advancement of Organ Transplantation in close collaboration with various organ transplantation teams (Art. 8).

3.3 Assessment

In general, Tunisian regulation respects Islamic legal rulings on organ transplantation. The Tunisian regulation does not mention the rule of necessity established by Islamic legal scholars; this rule permits an organ transplant if it saves the recipient's life. However, the Tunisian law has incorporated the Islamic legal rule that organ transplants are prohibited for vital organs: when the organ removal leads to the donor's death.

Another issue of concern for Islamic legal scholars is brain death. According to Islamic legal opinion, the death criteria fixed by the medical sciences can be followed. The Tunisian regulation fulfils this provision since the brain death criteria are regulated according to the standard criteria established by the medical society. Another issue discussed in fatwas concerns reproductive organs and cells. According to the majority opinion of Islamic legal scholars, the 'mixing of genealogy' must be avoided to fulfil the *maqāsid al-sharī'a* (goals of sharia), which includes maintaining the clarity of blood relationships. According to Islamic family law, a child can only be legitimate when born in wedlock. Sunni Muslim scholars prohibit any medical-technological procedures that

⁵⁶⁶ Decree No. 99-743 of April 1999, Tunisia.

⁵⁶⁷ Order of the Minister of Public Health of 2004, Tunisia.

could lead to uncertainty about the legitimacy of the child's lineage.⁵⁶⁸ The provision prohibiting the transplantation of reproductive organs in Tunisia's law fulfils Islamic legal provisions.

Tunisian law also follows the basic principles set up by the international community presented in the WHO Guiding Principles. Consent, as foreseen by the Guiding Principles, is the guiding line in Tunisia's regulations. Living donors in Tunisia must give informed consent and donate willingly and freely. This provision accords with Principle 3 of the WHO Guiding Principles, which states that the living donor must give informed and voluntary consent before the transplant. Principle 4, which prohibits the removal of an organ for transplanting from a living minor, is also incorporated in Tunisia's law because it states that living donors must be of age and must have full legal capacity. Tunisian law also respects the consent requirements for deceased donation established in Principle 1, which requires any consent required by law and prohibits deceased donation if the deceased is reluctant to donate post mortem. The law in Tunisia fulfils this principle because deceased donation is regulated by an explicit consent model: The donor must have expressed consent during their lifetime. If no such will has been expressed, the relatives need to give consent but cannot override the presumed will of the donor if they have expressed reluctance.

Tunisian law also respects Principle 5, which prohibits the sale and purchase of organs. In conformity with Principle 2, the Tunisian regulation requires that the physicians determining the death of a deceased an organ transplant may not be part of the organ removal operation. The only issue not incorporated in Tunisia's law is Principle 3's favouring of genetically, emotionally, or legally related living donation. Tunisia's law does not address the issue of related or unrelated living donations. However, organ transplantation practice in Tunisia includes unrelated living donation.

4. Algeria

4.1 In General

The first kidney transplant in Algeria was performed in 1986, a year after organ transplantation was regulated in Law No. 85-05 of 1985 on Health Protection and Promotion. In 2002, the first deceased-donor renal transplant was performed.⁵⁶⁹

⁵⁶⁸ See International Islamic Fiqh Academy, "Qirarāt al-dawra"; Clarke, *Islam and New Kinship*, 107.

⁵⁶⁹ Nasreddine Aissaoui, "The Perception of Families of Patients with ESRD Regarding Socio-Cultural Barriers to Organ Donation in Algeria," *Revue Interdisciplinaire* 1, no. 2 (2018): 2.

A year later, a living liver transplant was performed.⁵⁷⁰ To this date, no deceaseddonor heart, lung, or pancreas has been transplanted.⁵⁷¹ Although in 2012 the Algerian National Transplant Agency (ANG) was created by decree to coordinate and organize transplant processes, guidelines for transplantation are still lacking, as is system coordination.⁵⁷²

There are no official databases on organ transplantation in Algeria. However, it can be said that organ donation rates are low and that the health system coverage is insufficient for the large number of patients awaiting this type of treatment.⁵⁷³ Official figures are only available for some recent years. In 2018, the Council of Europe published a report containing organ transplantation data. This publication reported that 268 kidneys from living donors (6.4 pmp) and seven livers from living donors (0.2 pmp) had been transplanted in Algeria. The report also shows that only related living donations are accepted.⁵⁷⁴ The International Registry for Organ Donation and Transplantation only has figures for 2019 and 2020. In 2019, 268 kidneys were transplanted from living donors (6.28 pmp) and two from deceased donors (2.0 pmp). In addition, 11 livers were transplanted from living donors (0.26 pmp) as was one liver from a deceased donor (0.02 pmp). In 2020, the rate decreased: 91 kidney and two liver transplantations were performed. Algeria has a population of around 44 million.⁵⁷⁵

The capacity for performing organ transplants is insufficient for many reasons. There seems to be a lack of competent professionals trained in organ transplantation and immunology that can influence the performance and development of transplantation. Professionals report needing more equipment and infrastructure to perform operations. Another barrier to organ transplantation identified is the absence of policies to orient and coordinate transplantation among the various specialities, in addition to the absence of a policy for establishing a platform for implementing post mortem donation.

570	K. Bentabak et al., "Adult-to-Adult Living Related Liver Transplantation: Preliminary
	Results of the Hepatic Transplantation Group in Algiers," Transplantation Proceedings
	37, no. 6 (2005): 2837.
571	Aissaoui, "The Perception of Families of Patients with ESRD"; International Registry
	in Organ Donation and Transplantation, "Algeria".
572	N. Laidouni, D. Gil-González, and S. Latorre-Arteaga, "Barriers to Organ Transplanta-
	tion in the Algerian Health System from the Perspective of Health Professionals: A
	Qualitative Approach," Transplantation Proceedings 48, no. 10 (2016): 3262, 3266.
573	Laidouni, Gil-González and Latorre-Arteaga, "Barriers to Organ Transplantation," 3261.
574	Council of Europe's European Directorate for the Quality of Medicines & Health Care,
	"Newsletter Transplant 2018: International Figures on Dopnation and Transplantation",
	45 50

45, 52.

575 International Registry in Organ Donation and Transplantation, "Algeria."

Although there is a coordinating organization in Algeria, no advances have occurred in donation and transplantation due to a lack of leadership and coordinated action.⁵⁷⁶

4.2 Regulations

The laws regulating organ transplantation in Algeria are Law No. 85-05 of 1985,⁵⁷⁷ Law No. 90-17 of 1990,⁵⁷⁸ and Law No. 09-01 of 2000.⁵⁷⁹ Chapter III of Title IV of Law No. 85-05 of 1985 regulates organ transplantation. Art. 161 of Law No. 85-05 of 1985 permits general organ transplantation for therapeutic or diagnostic purposes and prohibits transplants from being the subjects of financial transaction. The Law No. 85-05 of 1985 further states that organs can be removed from living donors only if it does not endanger the donor's life (Art. 162). Consent must be obtained prior to a living organ donation in written form in the presence of two witnesses. The donor can only consent after receiving information on the medical risks that organ removal may entail (Art. 162). Furthermore, the Law No. 85-05 of 1985 regulates that consent must be revoked at any time (Art. 162). Art. 163 prohibits the removal of organs from minors, mentally disabled persons, and persons with diseases that may affect the health of the donor or the recipient.

Art. 164 of Law No. 90-17 of 1990, which modifies Law No. 85-05 of 1985, states that organs can be removed from a deceased person after medical and legal confirmation of death according to scientific criteria defined by the Minister of Public Health, provided is the donor expressed consent during their lifetime. If the donor did not express any wishes, consent must be given by the father, mother, spouse, child, or sibling, in this order of priority. However, the deceased person's cornea or kidneys may be removed without a family member's consent if the recipient's state of health so requires or if the organ required would deteriorate in the time between death and the granting of consent. Art. 165 of this law prohibits the removal of an organ if the person expressed their reluctance to donate during their lifetime. The same article prohibits the physician determining a donor's death from being part of the medical team that performs the transplant. Furthermore, it prohibits the disclosure of the identities of the recipient and the donor to each other and their families (Art. 165).

577 Law No. 85-05 of 1985 on Health Protection and Promotion, Algeria.

578 Law No. 90-17 of 1990 Amending Law No. 85-05 of 1985, Algeria.

⁵⁷⁶ Laidouni, Gil-González and Latorre-Arteaga, "Barriers to Organ Transplantation," 3264, 3266.

⁵⁷⁹ Law No. 09-01 of 2009 Amending the Penal Code No. 08-11 of 2008, Algeria.

Law No. 09-01 of 2009, modifying the Penal Code No. 08-11 of 2008, addresses the trafficking of human organs in its Second Title in Chapter 1 and penalizes the purchase and brokerage of organs. This law also specifies penalties for the removal of organs from a living or deceased person without consent and penalties for organ removal performed under aggravated circumstances: on a minor or a mentally disabled person or by groups carrying weapons or organized criminal groups. The penalties for trafficking tissue cells and other products of the human body are also defined.

4.3 Assessment

Algeria's law on organ transplantation adheres in principle to the Islamic legal requirements for organ transplantation. However, the language used in Algeria's regulation differs from the language used in the fatwas. The fatwas permit organ transplantation on condition of necessity, which means that the transplant needs to save the life or significantly improve the well-being of the recipient. Law No. 85-05 of 1985 permits organ transplantation only for therapeutic purposes, meaning that an organ transplant must improve the recipient's health. Therefore, the condition of necessity set by Islamic legal scholars is fulfilled. Algerian law also fulfils the legal requirement established in fatwas that vital organs without which a person cannot live may not be transplanted. Here again, the language of the law differs because it stipulates that organ transplantation may not endanger the life of a donor.

Islamic legal scholars have acknowledged brain death as a form of death and have left the criteria of death for medical experts to determine. The Algerian regulation accords with Islamic scholars' legal opinion by adhering to the death criteria formulated by medical societies.

Algerian law also follows the basic principles set up by the international community and represented in the *WHO Guiding Principles*. Algerian law expressly requires that informed consent be attained before a living donation. This provision accords with Principle 3 of the *WHO Guiding Principles*, which states that the living donor must give voluntary and informed consent before the transplantation. Principle 4 is also incorporated in Algeria's law, which prohibits the removal of an organ from a living minor for transplantation purposes. Algerian law fulfils this criterion by prohibiting organ transplantation from minors and mentally disabled persons.

Algerian law also respects the consent requirements for deceased donation established in Principle 1. Principle 1 requires any consent required by law and prohibits deceased donation if the deceased expressed reluctance during their lifetime to donating organs post mortem. The law in Algeria fulfils this principle because deceased donation is only permitted when the deceased has expressed consent during their lifetime; in any case, the law prohibits organ transplantation if the deceased expressed reluctance for organ donation.

The law in Algeria also respects Principle 5, which prohibits the sale and purchase of organs. In conformity with Principle 2, the Algerian regulation requires that the physicians determining the death of a deceased for organ transplantation may not take part in the organ removal operation. The only issue not explicitly incorporated in Algeria's law is Principle 3's favouring of for genetically, emotionally, or legally related living donation. Algeria's law does not address the issue of related or unrelated living donations, but only living related donation is practised in Algeria. Therefore, Principle 3 is followed.

5. Morocco

5.1 In General

In Morocco, the first organ transplant was of a kidney and took place in 1985. The issue was regulated more than a decade later in 1999 with Law No. 16-98 on the Donation, Removal and Transplantation of Organs and Tissues.⁵⁸⁰ Facts and figures on transplants in Morocco are scarce. Generally, organ transplant activity is rare in Morocco, and the focus lies almost exclusively on living related kidney donation.⁵⁸¹ Deceased-donor kidney transplantation was first performed in 2010.⁵⁸²

Over the past thirty years, around 600 recipients have benefited from kidney transplants, and around 60 have been performed from deceased donors.⁵⁸³ Official figures are available in the International Registry in Organ Donation and Transplantation, but only for the years 2004, 2005, 2011, 2019, 2020 and 2021. The data shows that living liver donation is practised in Morocco. The rates for 2004 and 2005 were 0.6 pmp and 0.3 pmp respectively. The organ donation rate for 2019 was 0.95 pmp; in 2020, 0.22 pmp and 2021, 0.32 pmp. Morocco has a population of 37 million.⁵⁸⁴ The data shows that the numbers have not improved even in recent years and remain at a marginal level.

⁵⁸⁰ Abdelkader J. El Hangouche et al., "Knowledge, Attitudes, and Practice of Organ Donation in Morocco: A Cross-Sectional Survey," Saudi Journal of Kidney Diseases and Transplantation 29, no. 6 (2018): 1361-1362.

⁵⁸¹ Marwan A. Masri et al., "Middle East Society for Organ Transplantation (MESOT) Transplant Registry," *Experimental and Clinical Transplantation*, no. 2 (2004): 219.

⁵⁸² Ahmadou Boly et al., "Estimation des besoins en greffe rénale au Maroc," *Nephrologie* & *therapeutique* 10, no.7 (2014): 513.

⁵⁸³ Mohamed Younsi, "Don D'organes Au Maroc: Beaucoup De Retard À Rattraper," October 18, 2021.

⁵⁸⁴ International Registry in Organ Donation and Transplantation, "Morocco".

A national plan has existed for promoting donation and transplantation to increase the number of deceased donations since 2011. However, the plan has yet to be put into action.⁵⁸⁵ The literature reports that the general Moroccan population remains unaware of the subject of donation and transplantation and that the refusal of organ donation by families following the declaration of brain death exceeds 50% of cases.⁵⁸⁶ Furthermore, the establishment of the register of refusal and consent to organ donation required by the law has been delayed.⁵⁸⁷

5.2 Regulations

In Morocco, transplantation is regulated under Law No. 16-98 of 1999 on the Donation, Removal, and Transplantation of Organs and Human Tissue.⁵⁸⁸ According to Art. 3, organ donation and transplantation are permitted only for therapeutic purposes. The law also requires that organ donation is free of charge and cannot be the object of a financial transaction (Art. 5). Prior to any organ transplant, the physician needs to ensure that the recipient has consented and that the organ is not affected by any disease that could endanger the recipient's life.

For living donation, Art. 8 stipulates that the removal may only be carried out if it does not endanger the donor's life or cause serious harm to the donor's health. According to Art. 4, the prior consent of the donor is needed. Art. 8 requires that the donor must be fully informed of the risks inherent in the removal, its possible physical and psychological consequences, and the results that can be expected for the recipient's health. The formalities of consent are detailed in the amending Law No. 26-05 of 2006.⁵⁸⁹ This law stipulates in Art. 10 that consent must be expressed before the president of the primary court of the donor's place of residence or the location of the hospital or to the judge's representative in the presence of two medical doctors. The amending law also states that only adults and persons of full legal capacity are permitted to donate (Art. 11). Law No. 16-98 of 1999 stipulates that only living related donations can be conducted. This includes the donor's parents, children, siblings, aunts, uncles, and spouse, provided they have been married for at least one year (Art. 9).

⁵⁸⁵ Boly et al., "Estimation des besoins en greffe rénale," 513.

⁵⁸⁶ Imane Esqalli et al., "Don d'organes issus de donneurs décédés et population marocaine," [Organ donation after death in Moroccan population] Nephrologie & therapeutique 11, no. 4 (2015): 235.

⁵⁸⁷ I. Haddiya et al., "Ten Years of Renal Transplantation in a Moroccan Hospital: Results and Constraints," *Transplantation Proceedings* 44, no. 10 (2012): 2980.

⁵⁸⁸ Law No. 16-98 of 1999 on the Donation, Removal, and Transplantation of Organs and Human Tissue, Morocco.

⁵⁸⁹ Law No. 26-05 of 2006 amending Law No. 16-98 of 1999, Morocco.

Post mortem removal of organs is authorized if the individual expressed their consent while alive (Art. 13) and this consent was registered at the court under the same conditions as for living donation (Art. 14). Someone who is opposed to donating after death can express and register their refusal through a declaration to the president of the primary court (Art. 18). If neither consent nor refusal was registered by the person during their lifetime, the principle of presumed consent is applied unless there is opposition from close relatives in the following order: spouse, parents, and, lastly, offspring (Art. 16). If the deceased was a minor or did not have full legal capacity, the removal can only be carried out after consent from the legal representative has been obtained on condition that the deceased has not expressed their refusal to donate (Art. 20). The removal of organs from a deceased person can only be carried out after the donor's brain death has been established by two doctors. These doctors may not be part of the medical team responsible for the removal and transplanting of the organ (Art. 21). According to Art. 22, brain death must be established according to clinical and paraclinical signs defined by the Minister of Health at the proposal of the National Order of Physicians.

The law has prohibited the sale and purchase of organs. Chapter 5 of this law regulates the penalties for any violation of the law.

5.3 Assessment

Morocco's law on organ transplantation adheres in principle to the Islamic legal requirements for organ transplantation. The language used in Morocco's law differs from that used in the fatwas. The fatwas permit organ transplantation on condition of necessity, which means the procedure must save life. The law in Morocco permits organ transplantation only for therapeutic purposes, which means that organ transplantation must improve the recipient's health. Therefore, the condition of necessity set by Islamic legal scholars may be considered fulfilled. Moroccan law has also incorporated the legal requirement established in fatwas that vital organs may not be transplanted. The law slightly differs in the language used since it stipulates that organ transplantation may not endanger the life of the donor.

Islamic legal scholars have acknowledged brain death as a form of death and let medical experts determine the criteria of death. The Moroccan regulation follows the legal opinion of Islamic scholars by adhering to the death criteria formulated by medical societies.

Moroccan law also follows the principles set up by the international community in the *WHO Guiding Principles*. The *WHO Guiding Principles* state in Principle 3 that free, voluntary, and informed consent is required for living donation. Moroccan law accords with this principle, which states that the living donor must give voluntary and informed consent before the transplantation. Principle 3 also favours genetically, emotionally, or legally related living donations. Morocco's law fulfils this criterion by only allowing related living donations.

Principle 4 is also incorporated in Morocco's law, which prohibits the removal of an organ for transplantation from a living minor. Moroccan Law respects this criterion by prohibiting organ transplants from minors and legally incompetent persons.

Moroccan law has also incorporated the consent requirements for deceased donation established in Principle 1. Principle 1 requires any consent required by law and prohibits deceased donation if the deceased has expressed reluctance to donate organs post mortem. The law in Morocco fulfils this principle because deceased donation is prohibited when the deceased has expressed their refusal during their lifetime. If no refusal or consent is recorded, transplantation is permitted unless the relatives object.

Principle 2, which states that the physicians determining the death of a deceased person for organ transplantation may not be part of the organ removal operation, and Principle 5, prohibiting the sale and purchase of organs, are both incorporated in Morocco's law.

V. Conclusion

From the 1970s onwards, living kidney transplantation became a standard method of therapy with the initial introduction of highly effective immunosuppressive drugs. The first kidney transplants in the Muslim-majority states of the Middle Eastern and North African regions were performed in the 1970s and 1980s, when kidney transplants were being performed in increasing numbers worldwide. Immunosuppressive drugs and advances in medical practice also made deceased organ transplantation possible. After the brain death criteria were developed at the end of the 1960s, deceased-donor transplantation became a viable therapeutical method. From the 1980s onwards, deceased-donor organ transplants became increasingly established. In Muslim-majority states, deceased-donor organ transplants were first practised much later due to the rejections initially expressed in fatwas by influential Islamic legal scholars. The first deceased-donor transplants were mostly performed in the late 1990s and early 2000s. Some states have not yet performed deceased-donor transplants due to lacking resources and expertise.

The first laws on organ transplantation in Middle Eastern and North African states were enacted in the 1970s, and many were revised during the 2000s and 2010s. The issue of living organ transplantation is regulated in all the states examined except for Iran. Deceased-donor organ donation is also regulated in all states except for Yemen.

Data on the numbers and types of organ transplants is generally lacking. The data available indicate that most states have a living kidney transplantation programme and that ever more living liver transplants are performed. In contrast, most states do not have a functioning or efficient deceased-donor programme. Therefore, most states rely on living organ transplants. The exception is Iran, which has recently performed more deceased organ transplants than living. The Gulf states have also managed to increase the deceased-donor rate in recent years. In general, there is a gap between countries that are in a political, economic, or humanitarian crisis and relatively stable countries, such as the Gulf states. A generally stable situation is beneficial for legal organ transplantation activities. In many unstable states, reports can be found on illegal activities such as commercial transplantation and organ trafficking.

The laws examined in the MENA states are very similar overall. Many states require a necessity for legal organ transplantation, in reference to Islamic legal rulings. The laws use the terminology of the fatwas, such as that organ transplantation is permitted to save the life of another person who needs an organ. Also in a clear reference to fatwas, organ transplantation is prohibited if it endangers the life or the well-being of the donor, such as in the transplantation of vital or single organs. Interestingly, many states explicitly prohibit the transplantation of reproductive organs out of fear that this could lead to a 'mixing of genealogies', which is forbidden by some Islamic legal scholars' opinions.

Except for Yemen, all the states examined accept deceased donations and the concept of brain death in their laws at least indirectly. The brain death criteria incorporated in the laws follow the standard criteria established in the medical sciences. All laws require the diagnosis of brain death according to common standards, such as a diagnosis by three physician from different specialisms. Muslim scholars have legally approved brain death as a form of death that subsequently permits deceased-donor transplantation.

The purchase and sale of organs are prohibited in the laws of all the states examined. In Iran, however, living commercial kidney donation is a common practice regulated not by state law but by guidelines derived from fatwas published by high-ranking Shia scholars. Another regulation that all states have in common is the prohibition of transplantation from minors. None of the states except for Saudi Arabia and Tunisia address allocation regulation in their laws.

The laws examined overall respect the principles expressed in the *WHO Guiding Principles*. Consent from both living and deceased donors is required in all the laws examined. For living donations, most states require informed and free consent, although some states do not specify consent further. For deceased donations, the formal requirement of consent is high, such as expressing consent in a will, the requirement of witnesses, or the expression of consent before a judge. In most laws, the next of kin is required to consent if the deceased did not express their will during their lifetimes. However, it often remains unclear whether the family's consent can override the deceased's will. The overruling of the objection of a deceased donor expressed during their lifetime by their next of kin would contravene the *WHO Guiding Principles;* however, it is unlikely that the next of kin would overrule the deceased's objection. To overrule an objection expressed during lifetime would be against the best interests of the deceased in the common sense.

All laws prohibit commercial organ transplant transactions, also following the WHO Guiding Principles. All the laws examined have also enacted the principle that no organs be removed from minors. In most states, two issues are not regulated according to the Guiding Principles: Firstly, allocation is not a subject of regulation in most states' laws. The Guiding Principles require that clinical criteria and ethical norms, such as equity, external justification, and transparency, guide the allocation of organs. Secondly, living unrelated transplants are permitted in some states. The Guiding Principles consider living unrelated transplantation as ethically problematic and discourage this practice.

Part III

Conclusions and Results

I. General Conclusions

Muslim jurists develop legal norms by referring to the sources of Islamic law and the methods of legal interpretation and derivation developed in Islamic jurisprudence. Because Islam claims to encompass all aspects of life, Muslim jurists have the authority and duty to assess the legality of actions and behaviours on all spheres. This also applies to the medical field. Islamic jurisprudence has traditionally always accepted medical treatments to improve human beings' health and relieve suffering. Islamic legal scholars have treated this issue in their legal discussions and from Islamic legal sources have established the principles to be applied in medical contexts. Today, documents on Muslim bioethics such as the Islamic Code of Medical Ethics refer to these principles. The essential principles in the medical context are the principle of fard kifaya (collective duty), which requires every member of society to save another human being's life if possible. Fard kifāya is derived from one of the five maqāşid al-sharī'a (goals of sharia), the duty to preserve life. Another crucial principle is the principle of maslaha (the common good of the people). Maslaha requires Muslim jurists to weigh and balance the possible benefits of actions against their possible harms. This principle is applied when changing circumstances are incorporated in considering the permissibility of a specific medical treatment.

Muslim jurists regularly give legal assessments derived from Islamic legal jurisprudence. The medium of choice for their assessments is the fatwa, an authoritative legal opinion on specific matters. Fatwas have gained importance in the last few decades as ever more new topics have emerged due to recent scientific and technological advances. Organ transplantation is one example. Muslim legal scholars published fatwas on organ transplantation as early as the 1950s and 1960s, which shows that they do not abstain from dealing with novel issues. Fatwas are usually given upon request from a Muslim believer in need of legal guidance. Legal scholars competent in exercising *ijtihād* (independent reasoning) issue an answer to the petitioner's request as a fatwa. Fatwas can also be published more widely in media, fatwa collections, and topical monographies.

Recently, institutions have been established to issue fatwas on bioethical subjects. The most influential in Sunni Islam are the University of al-Azhar and fatwa councils such as the Muslim World League in Mecca and the International Islamic Fiqh Academy. Their published opinions are widely acknowledged for their authority. Although fatwas are not legally binding, since they are not given by the legislative authority in a state, they are authoritative for Muslim believers.

The fatwas issued on organ transplantation primarily concern the permissibility donations from living and deceased donations. When organ transplantation first became medically possible, public debates on the topic in the Muslim world were controversial. Organ transplantation was thought to undermine the traditional legal understanding of life and death. Today, the majority opinion of Muslim legal scholars is in favour of organ transplantation. Legal scholars agree that living and deceased human beings have an inherent *hurma* (dignity) which protects their bodies from interference. However, this inviolability can be overridden, and organ transplantation is justified if other legal-ethical principles are given preference.

The principles that justify deceased and living organ transplantation are *darūra* (necessity), which renders a prohibited act permissible in case of severe duress, and *fard kifāya*, which imposes the duty to save a life on every Muslim. Muslim scholars eventually accepted that the concept of brain death is in accordance with Islamic law. Muslim jurists mainly argue that death has occurred when the body can no longer respond and serve the soul. Brain death is a form of this state. Furthermore, Muslim jurists argue that the criteria and diagnosis of death depend on human experience because Islamic sources have not defined death. Therefore, it is appropriate from a religious perspective to apply the death criteria accepted in the medical sciences, which includes brain death as a form of death.

Organ transplantation has also been treated from ethical and legal points of view in academic contexts and by international legal bodies and various bioethical councils to determine how organ transplantation should be regulated. The leading principles of bioethics are the principles of autonomy, beneficence, nonmaleficence, and equity. These principles have informed various legal documents on bioethics, such as the UNESCO Universal Declaration on Bioethics and Human Rights (UDBHR). The WHO Guiding Principles on Human Organ Transplantation is the legal-ethical document most internationally relevant to organ transplantation. The WHO Guiding Principles were first endorsed in 1991 to provide an ethical framework for the acquisition and transplantation of human organs. The Guiding Principles emphasize preserving the donor's life and health, voluntary and informed consent, noncommercial donation, and preferences for deceased over living donation and related living over unrelated living donation. This analysis of the laws of Middle East and North Africa (MENA) states has shown that the states have kept pace with developments in organ transplantation. Concurrently with the development of organ transplantation as a therapeutic method, the states in the MENA region started to legislate on the issue. The pieces of legislation were influenced by the ethical-legal discussions in Islamic jurisprudence, in academia, and in various bioethical councils and international organizations. Therefore, these pieces of legislation are an amalgam of Islamic ethical-legal elements and internationally formed ethical-legal standards. The elements in the legislation that can be seen as rooted in fatwas are the permission of living and deceased donation to save another person's life, which is an expression derived from the Islamic legal principle of fard kifava and the legal principle of *darūra*; the prohibition of living organ donation if it endangers the life of the donor, derived from the Islamic legal prohibition of self-harm and suicide; the acceptance of brain death criteria, arising from the opinion that Islamic legal tradition leaves the definition of death to medical experts due to the absence of a definition in the Islamic source; and the prohibition of donation of reproductive organs because of the danger of 'mixing genealogy', which contradicts the magasid al-shari'a to preserve Islamic family values, including the preservation of legitimate lineage according to Islamic family law.

Elements that are especially prominent in the WHO Guiding Principles on Human Organ Transplantation that are also found in the legislation examined are free and informed consent for living donation, the prohibition of the sale and purchase of organs, and the preference for living related donation over unrelated living donation.

Although certain elements of regulation are more important to Islamic law and others are more important to the *WHO Guiding Principles*, many elements are essential to both systems. For example, the equivalent to the requirement of *darūra* for organ transplantation to save another person's life in Islamic law is the requirement expressed in the *WHO Guiding Principles* that organ transplantation needs to have a therapeutic effect and must not harm the donor's life or health. Likewise, the requirement of noncommercial donation emphasized in the *WHO Guiding Principles* is also found in the fatwas. Some regulations seem to have been informed by both Islamic law and common international bioethical standards, such as the regulations on brain-death donation: Islamic law permits organ transplantation from brain-dead donors by accepting brain death as a form of death. Details on the ethical handling of brain-dead donation are informed by international ethical standards that were established in the medical field and expressed in the *WHO Guiding Principles*, such as the requirement that a tripartite committee comprising physician from

Lastly, some elements that are discussed in fatwas or required by the WHO Guiding Principles are not well received in the regulations of the examined states. At the beginning, most Islamic legal scholars opposed deceased donation due to the concept of bodily resurrection after death in Islamic legal tradition. Organ removal was thought to break the requirements of Islamic burial rites, in which a corpse needs to be buried intact because the body is needed for resurrection after death. Although this issue was the subject of long and controversial debates, only a few states explicitly legislated that the corpse needs to be rendered to its original state externally after the removal of the organ. One might have expected that more states would have legislated similar requirements to fulfil some Islamic legal opinions. Another issue that is not widely addressed in the legislation is the equitable allocation of organs stipulated in the WHO Guiding Principles. Although not discussed widely in prominent fatwas on organ transplantation, just and fair allocation is also a requirement for transplantation from an Islamic point of view. It can only be assumed that MENA legislature have not addressed this issue in their laws but in other documents, such as guidelines for medical professionals' practice.

II. Answers to Research Question

The literature on Islamic law finds that the laws today in states with an Islamic legal background were mostly replaced by European or European-inspired laws during colonization in the 18th and 19th centuries, except for personal status law. The states later codified personal status laws in line with classical Islamic law, which had been developed and applied by jurists during the centuries before European colonization. The literature also finds that the fields of law that have emerged in response to technological and scientific advances, such as organ transplantation in the medical field, follow an internationally set legal standard and, thus, are not based on religious law.

The examination of organ transplantation laws in Muslim-majority states of the MENA region has shown that organ transplantation laws are an amalgam of Islamic legal norms and the international standard rules derived from the common bioethical principles represented in the WHO Guiding Principles on Human Organ Transplantation. The analysis presented here indicates that organ transplantation laws in MENA states do not fall into the category of laws based on classical Islamic law, nor do they fall entirely into the category of laws with no connection to Islamic law. The research has shown that laws regulating novel issues are shaped by Islamic and non-Islamic legal elements.

The reason for using the specific wordings derived from fatwas might be a desire to show that Islamic law was incorporated in the regulations and that the regulations accord with Islamic law. This would support the view that sharia continues to play a programmatic rather than substantial role in legislation processes, including in laws on novel subjects. Sharia is used in this way to give laws a higher legitimization. The legislator also uses sharia to give laws a certain quality that Muslim societies demand: that the laws represent their identity through the acknowledgement of their legal culture, even though today's laws are no longer derived from classical Islamic laws but are legislated by the state (and not God), the only legitimate lawgiver in modern states.

The analysis presented here indicates that the influence of Islamic law seems to be restricted to the permissibility of organ transplantation while neglecting other issues that are discussed in fatwas, such as the question of the state of the corpse after organ removal, which is a critical aspect in Islamic law on rituals. Furthermore, the Islamic legal-ethical elements incorporated in the regulations are congruent with general bioethics as represented in the *WHO Guiding Principles*. It can be argued that the regulations on organ transplantation would have remained largely similar even without reference to the elements extracted from fatwas by following the wording of the *WHO Guiding Principles*. Two examples are that organ transplantation must follow therapeutic purposes and that the health of the donor must be protected throughout the process, which are expressed in the legislation of many MENA states as the requirement of necessity to save another person's life and the prohibition of removing a vital organ.

In any case, the prevalent characterization of Islamic law found in the literature cannot be confirmed for organ transplantation laws. Organ transplantation laws have no grounding in classical Islamic law, but they are not entirely detached from Islamic law. It is conceivable that this finding can be applied to other fields of legislation following the same logic. Because Islamic law claims to regulate all aspects of life and lay Muslims are interested in knowing and following Islamic legal rulings on the various aspects of their lives so that they can live by Islamic law, fatwas are given on every topic. Legislators then acknowledge the opinions published in fatwas by producing regulations that are at least congruent with Islamic legal rulings. This finding indicates that the belief popularized by Islamist movements, that the majority of laws in MENA states do not conform to sharia, is erroneous, at least for the issue of organ transplantation. However, further research analysing novel laws is needed to make similar statements about other fields of law.

III. Further Results

This analysis of organ transplantation laws in Muslim-majority states of the MENA region does not support the view that a 'closing of the door of *ijtihād*' has occurred in Sunni Islam.⁵⁹⁰ This work has shown that Muslim legal scholars have exercised *ijtihād* on the topic of organ transplantation, a subject that the primary Islamic legal sources did not cover and on which no precedent ruling exists in the Islamic legal tradition and have nonetheless developed rulings derived from Islamic law. Furthermore, the argument that Islamic law no longer exists since the rise of the modern nation-state system cannot be confirmed either, because numerous fatwas have been published on the issue of organ transplantation. These fatwas are authoritative and have a binding effect on the Muslim believer even though they are not enforced by the state and, thus, are not legally binding.

A further conclusion concerns the phenomenon labelled re-Islamization in the literature. The literature finds that it is mainly criminal law that has been affected by the re-Islamization process because some states have re-introduced some rules from classical Islamic law in their state legislations. Re-Islamization efforts are also observed in the provisions found in some states' constitutions that require the state's laws to be compatible with the sharia. These shariacompatibility provisions in constitutions have been found to have more of a 'cosmetic' nature than having had any real effect on the actual introduction of Islamic law in state legislation.⁵⁹¹ This examination of organ transplantation laws has shown that the popular demand that state laws have a connection to Islamic legal culture has succeeded to some extent.

Summary

This research has shown that all Muslim-majority states except Iran have legislated the issue of organ transplantation for living transplantation and all except Yemen for deceased organ transplantation. All states allow living and deceased donation provided that the transplantation saves another person's life and the procedure does not endanger the donor's life. Brain death is accepted in all states as a form of death. The donor's consent is also required in all states for both living and deceased transplantation. All the regulations examined

⁵⁹⁰ Schacht, Introduction to Islamic Law, 70-71.

⁵⁹¹ Peters, "From Jurists' Law to Statute Law," 91; Lombardi, State Law as Islamic Law, 129, 135; Lombardi, "Constitutional Provisions," 770.

require the next of kin to consent if the deceased did not express their will to donate during their lifetime. However, most laws have not explicitly addressed whether the family needs to act according to the presumed will of the deceased, although it can be assumed to be so. All states prohibit the sale and purchase of organs in their laws except for Iran. In Iran, a programme is in place for commercial living organ transplantation; the state gives the donor a monetary 'gift of altruism' and a price is negotiated privately between the donor and the recipient.

The laws in Muslim-majority states of the MENA region generally follow an internationally set standard for ethical regulation of organ transplantation. This examination of the laws has also shown that they clearly incorporate rulings from Islamic law. These rulings or legal opinions are called fatwas and are developed by Muslim legal scholars with the sources and methods of Islamic jurisprudence. Therefore, organ transplantation laws are an amalgam of international legal-ethical standards expressed in the *WHO Guiding Principles on Human Organ Transplantation* and Islamic law. However, the influence of Islamic law is mainly restricted to the question of the permissibility of organ transplantation and, thus, whether the regulations follow sharia.

This leads to the finding that novel laws, such as organ transplantation laws, are not completely detached from the Islamic legal tradition, as claimed in the literature on Islamic law. It seems as if the idea that laws in MENA states should comply with the sharia has affected new legislation. Organ transplantation laws comply with the sharia by having incorporated rules established in fatwas and highlight this fact by employing the terminology used in these fatwas.

About the Author

Arezoo Sang Bastian studied law at the University of Zurich and the University of Strasbourg. She also studied Middle Eastern Studies at the University of Zurich. She is a former research assistant at the Chair of Prof. Dr. Andrea Büchler and former project manager of the Center for Islamic and Middle Eastern Legal Studies (CIMELS) at the University of Zurich. She is currently working at a Court in Zurich.

The Faculty of Law of the University of Zurich accepted this thesis as a doctoral dissertation on the 4th of October 2023 at the request of Prof. Dr. Thomas Gächter and Prof. Dr. Brigitte Tag and awarded it the distinction *magna cum laude*.

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Published in the *sui generis* series, edited by Marc Thommen.

1st edition, 31 January 2024 © 2024 Arezoo Sang Bastian Print of the dissertation approved by the Faculty of Law of the University of Zurich.

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Published with the support of the Swiss National Science Foundation.

ISBN: 978-3-907297-52-0 DOI: 10.38107/052 Proofreading: Dr. Simon Milligan Design: Müller+Hess, Basel Print: Ebner & Spiegel, Ulm

www.suigeneris-verlag.ch

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When describing the legal systems and laws of today's Muslim-majority states in the Middle Eastern and North African (MENA) region, two categories of laws are identified: one derived from Islamic and one from non-Islamic law. Following this notion, the literature finds that novel legal areas do not have any connection to Islamic law since they were not regulated by classical Islamic law. In contrast, the topic of organ transplantation is inherently connected to Islamic law because Islam considers itself to encompass all aspects of life. This research based on the analysis of organ transplantation laws of the MENA states encourages to rethink that a strict dichotomy between Islamic and non-Islamic laws does not exist. Organ transplantation laws in MENA states generally follow an international legal standard while also complying with the sharia.

sui generis ISBN 978-3-907297-52-0 DOI 10.38107/052