

of assisted reproduction. Somehow, against all odds and despite religious guilt, Muslim men are able to masturbate, reach orgasm, and ejaculate into a plastic cup within the cramped spaces and over the toilets in IVF clinics across the Middle Eastern region. Just as ICSI is serving to normalize male infertility through medicalization, ICSI is also normalizing "medical masturbation" in the Muslim Middle East. Although masturbation may be viewed as *zina* in Islam, millions of Muslim men are masturbating out of medical necessity, and some are even embracing the idea of masturbation as a healthy, pleasurable, and guilt-free form of male sexuality. In short, emergent masculinities in the Middle East now include masturbation, especially on the way to becoming ICSI fathers.

## Islam and Assisted Reproduction

### IBRAHIM AND HIS FIFTEEN FAILED ICSIS

January in Dubai is a lovely time of year. The sun shines, but the winter temperatures are moderate, making it pleasant to be outdoors. It was on such a day in January 2007 when I met Ibrahim and his wife Nura outside the ultrasound scanning suite of an IVF clinic on the outskirts of Dubai. I was packing my bag to leave for the day, when Ibrahim approached me, having read my study advertisement placed on the waiting room tables. We made a tentative appointment to meet later in the month. But as soon as I stepped into the waiting taxi (with Ahmed, my driver), I received a call from Ibrahim on my cell phone, asking if we could meet sooner, ideally at his home. I agreed, and two days later, on Ibrahim's way home from work, he picked me up at the clinic for the short ride to his and Nura's spacious, high-rise flat, overlooking an inland lake. I commented on the beauty of the couple's home and its view, and Ibrahim proceeded to give me a tour, showing me the second bedroom where he hoped there would soon be a child. We then sat down on the ornate, Louis XV-style furniture in the living room to talk about Ibrahim's infertility problem and the couple's ICSI quest.

Married for thirteen years, Ibrahim and Nura were first cousins, the children of two Palestinian sisters. Ibrahim had grown up in a Palestinian family in Kuwait, but when he visited his mother's family in Jineen (now part of Israel), he met his beautiful cousin Nura, falling madly in love with her. They married "for love" in 1993, and by 1994, the questioning began about why Nura was not yet pregnant. "You know our traditions in the Middle East," Ibrahim said to me. "We get married, and after one year, everybody starts asking what's going on. If you go for more than one year [without a pregnancy], this comes to be seen as a problem."

Nura began the treatment quest by visiting a doctor in 1995. When the doctor told her that she was able to become pregnant, Ibrahim did his first "check up," a semen analysis which proved to be "very bad." The physician advised Ibrahim to go to a "specialist." Ibrahim consulted a urologist and, per Middle Eastern medical tradition, Ibrahim ended up undergoing a varicocelectomy in 1995. Not surprisingly, the varicocelectomy did nothing

to improve Ibrahim's sperm count. "After that, I did many tests," Ibrahim explained. "And still, the results turned out to be very bad." He then volunteered, "I have a copy of all my medical reports. I could show them to you on Sunday. Always, the semen count was 400,000 to 500,000, very, very weak. And after one-half hour, everything died. There was fragmentation, also."

"Our journey starts here," Ibrahim told me, immediately launching into a story of thirteen failed ICSI attempts between 1995 and 2007, the last one conducted during the sacred month of Ramadan the year before. In the early days of their ICSI quest, Ibrahim and Nura focused on Jordan, a country with a Palestinian majority, Palestinian-run IVF clinics, and a "famous" IVF hospital in Amman, one of the first to perform IVF in the Middle East. Traveling from their home in Kuwait to Jordan was both taxing and expensive. Nonetheless, Ibrahim and Nura attempted ICSI seven times in Jordan at three different IVF centers. At that time, the cost of one ICSI cycle was 1,500 to 2,000 Jordanian *dinars* (approximately \$2,100–2,800), but Ibrahim's monthly salary was only 200 Jordanian *dinars*, or one-tenth the amount of one ICSI. In desperation, Nura contemplated selling her bridal gold. Fortunately, however, Ibrahim secured a good job in Dubai as an accountant, and the couple moved there in 1999.

Within their first year in Dubai, Ibrahim and Nura underwent two ICSIs in Emirati government hospitals, where assisted reproductive technologies were partially state-subsidized. However, both ICSIs failed, and the couple became concerned about standards of cleanliness, having seen cockroaches on the hospital walls.

As the new millennium was fast approaching and their nine ICSI cycles had all failed, Ibrahim became convinced to "stop searching in Arab countries." A Palestinian friend in France made an appointment for Ibrahim and Nura at an IVF clinic in Rouen. There, a chromosome test of Ibrahim's sperm showed "fragmentation," an indication of a chromosomal defect. Reviewing Ibrahim's case, the French doctors told him bluntly, "We can't do anything for you. And since you did ICSI more than nine to ten times, we cannot do it again, because the French rules say that we cannot do ICSI after four times." They then suggested adoption, which shocked Ibrahim. "That's fine for you," Ibrahim told the French doctors. "But for us, as Muslims, we have a different tradition."

Demoralized but not destroyed, Ibrahim began his "research," drawing upon his global network of relatives and acquaintances in the Palestinian diaspora. Fortunately, one of Ibrahim's Palestinian friends in Los Angeles told him that he would be willing to help with the ICSI quest. Despite the difficulty of obtaining visas for travel to the post-9/11 United States, Ibrahim and Nura's patience paid off. They were eventually allowed to seek medical care in America. There, they visited IVF centers in both Las Vegas

and Los Angeles, agreeing that their best chances for ICSI success were at UCLA, where, in the words of Ibrahim, a "master doctor" was in charge of the IVF clinic.

For the first time in a decade of ICSI-seeking, Ibrahim and Nura were offered preimplantation genetic diagnosis (PGD). In Ibrahim and Nura's case, the UCLA physician wanted to determine whether the couple's ICSI embryos were carrying genetic defects, causing repeated ICSI failures. After verifying that PGD was religiously acceptable, Ibrahim and Nura agreed to PGD, and learned that eight of their twenty embryos were free from obvious genetic disease. As Ibrahim recalled, "He [the IVF doctor] told me something funny then. He said, 'You have seven girls and one boy.' I said, 'I don't give a damn shit for girls or boys, Doctor! All I want is a child!' So he returned back [to Nura's uterus] three girls and one boy."

Ibrahim and Nura were scheduled to return to Dubai a week after the embryo transfer, and Ibrahim carefully changed their tickets from economy to business class, so that Nura and the four ICSI embryos could "recline" in transit. After their return to Dubai, Nura underwent a pregnancy test—again negative. "My God, you cannot imagine how disappointed we were," Ibrahim exclaimed. Calling me by my first name, he continued,

In the U.S., Marcia, the trip cost me, with the travel, with everything, around \$35,000. Maybe I've spent more than \$100,000 in total for all of the [ICSI] trials. If somebody else had done this to Nura, I'm sure she couldn't stand it. Sometimes, I come back home, and I find her crying. The environment here in the Arab countries, I mean, her sister is getting pregnant, my brother's wife is getting pregnant, and sometimes they cannot stop it [their fertility]! Our family is not interfering, and it's a love marriage. But sometimes, you know, I told her, "All of the problem is because of me, not you. It's from my side. If you want, we can divorce." But she refused. She told me, "If there is going to be a baby, it has to come from you."

He then asked me, "It's so frustrating; I have to do ICSI. But how and where?" At this point, I broached the delicate topic of sperm donation. Ibrahim responded,

Somebody suggested sperm donation, but we totally refused. For both of us, it's not in consideration. [Why?] Because I refuse it. If the sperm comes from somebody else, you know, inside your heart, you will know it is not yours. Not our color, not our eyes, different things will come out. That's why we refuse. He will not be my son. But maybe I will go for the other one, cloning, or how they did Dolly the sheep. This cloning I have no problem with. [Even if Islam doesn't allow it?] I'm sure they *will* allow it eventually. IVF started in

the 1980s, and at first, the Islamic authorities didn't accept, but now they accept. Maybe after five years, they will accept cloning. But using a donor, no. It's not from your back [where sperm are thought to be made]. It's not from you."

Nura, who had been quietly following the conversation added, "It's like adoption. I wouldn't do it because I don't like the idea."

Given their opposition to adoption and gamete donation, both of which are prohibited in Sunni Islam, Ibrahim and Nura explained that they must use their own gametes. According to Ibrahim, their reproductive fate is ultimately in God's hands,

I believe in science, but also God. I believe in science, but if God wants to give, He will. We have the same belief, that if God wants to get us something [a baby], he will give. One of my friends, he was having the same problem as me. Every year, he was going on a vacation with his wife to Jordan and doing ICSI, and it was not happening. Then two years ago, I got back in touch with him. He said, "You'll never believe what happened! I got fed up going to clinics here and there and just spending money. So my wife and I went to Saudi Arabia on the *umra* [a form of pilgrimage], and we were staying there and praying to God. And, yes, it happened."

"So you see," Ibrahim said, "This is from God. You have to believe."

According to Ibrahim, he would be satisfied if God granted him one child. "One baby and that's it! Not more. I told Nura, 'If I get one baby, your ovary, I will remove it!' I don't want to think about it anymore! This is the only, and lonely problem in my life. I don't have any other problem."

Ibrahim told me that he had contemplated going to Belgium, where ICSI was invented, but he had decided against it. "One doctor, he advised us to go to Belgium. But after we tried ICSI in America, I feel that what we do here [in the Middle East] is the same." At the time of our meeting, Ibrahim had placed his hopes in the private IVF clinic on the edge of Dubai where I first met him. Although the IVF physician was a Hindu from India, Ibrahim found him "down to earth," a physician who had still "found hope" in Ibrahim's poor sperm profile. Ibrahim continued,

When I'm alone, I start thinking, "What's wrong with me?" I don't know how to explain it. Sometimes, I think my problem was caused by the fear I faced in Kuwait in 1991. The Kuwaiti people came back to Kuwait [from Iraq], and I was there after the [First Gulf] war finished. They came back and caught all of the Palestinians they could find [whose leader, Yasir Arafat, had supported Saddam Hussein]. They caught me for one night and tortured me, blindfolding my eyes and beating and slapping me. They took me from my house and I

didn't know where I was going because they put a blindfold over my eyes. I was blindfolded, but I felt that there were about eight people there, in a building or a basement, and they tortured me. Then after that, they threw me out, and when the blindfold was removed from my eyes, my eyes opened, but I couldn't see anything for about one-half hour. This happened two years before marriage, and the shock of that, of this happening in the place where I was born and lived for twenty-five years, I don't know, but I think this experience may have caused my problem.

After this sobering conclusion to our interview, Ibrahim and Nura drove me home, chatting amiably about how much they enjoyed the United States and the "friendliness" of Americans. I was able to show them around the pretty, American-affiliated desert campus where I lived with my family. I promised to keep in touch and to make a few inquiries on their behalf. I was heartened by the fact that Ibrahim and Nura still had three female embryos in frozen storage at UCLA. Ibrahim had told me that returning to America to try a so-called "frozen cycle" with these embryos was too difficult, financially and emotionally. "If it is guaranteed that I will 'catch' these three girls [as my children], I will go and put!" he had exclaimed during the interview. But rightly so, Ibrahim realized that there were no such guarantees.

Several weeks after our interview, I inquired with the clinic's "embryo courier" service about whether it was possible to transport three viable embryos all the way from Los Angeles to Dubai. When the courier replied "yes," I decided to introduce him to Ibrahim, a meeting that took place after Ibrahim and Nura experienced their fourteenth failed ICSI cycle at the Dubai IVF clinic. Ibrahim was very excited about the prospect of transporting their three embryos from the United States to the UAE but was told by the courier that this would cost approximately \$2,500. Ibrahim laughed, "What the hell! After all I've paid, this is nothing!"

I left the UAE in July 2007, after six months of fieldwork at the clinic. I learned from the clinic's embryologist—a fellow Palestinian who had taken a special interest in Ibrahim and Nura's case—that the three embryos were flown from Los Angeles in a cryopreservation tank that was hand-carried all the way from LAX through customs at Dubai International Airport. With the help of the Indian doctor, Ibrahim's and Nura's "three girl embryos," made in America and thawed in the UAE, were transferred into Nura's uterus on the Emirati IVF clinic's operating table.

Unfortunately, God decided that the time was still not right for Ibrahim and Nura to become parents. On the fifteenth attempt at ICSI, the three female embryos did not implant in Nura's womb, and Ibrahim's dreams of fathering three little "American-made" Palestinian daughters vanished.

## ISLAMIC LOCAL MORAL WORLDS

Ibrahim's story is not only about a tragic ICSI quest. It is a quintessential story about the local moral world of a severely infertile Muslim man and what is at stake for him in trying to become a legitimate father. Neither sperm donation nor adoption of a child can satisfy Ibrahim's parenting desires. Sunni Islamic mandates have prohibited these options for practicing Muslims, and because Ibrahim is pious, he takes these moral injunctions quite seriously. Without these pathways to parenthood, Ibrahim must use his own gametes to conceive a child. However, Ibrahim's sperm are not healthy. PGD, a technology that has been approved by the Islamic authorities,<sup>1</sup> has detected a chromosomal defect that necessitates culling of some of Ibrahim and Nura's embryos. Despite all of Ibrahim's best efforts—including an expensive trip for the couple from Dubai to UCLA, the hand-carried transport of his presumably healthy female embryonic progeny from UCLA to Dubai, and his ongoing faith in both "science and God"—Ibrahim is never able to become the father of his own biological offspring. He dreams of a day when the Islamic authorities will approve of cloning, which could be used to bypass the problem of his infertile sperm. Unfortunately, Ibrahim's own gametes are seriously "fragmented," which he attributes to the shock and fear of wartime torture, rather than to a chromosomal defect, which could be attributed only to God's divine creation. That God makes some people infertile is stated clearly in the Qur'an:

Unto Allah belongeth the Sovereignty of the heavens and the earth. He createth what He will. He bestoweth female [offspring] upon whom He will, and bestoweth male [offspring] upon whom He will; Or He mingleth them, males and females, and He maketh barren whom He will. Lo! He is Knower, Powerful.<sup>2</sup>

Thus, when Ibrahim poses his "why me?" question, he does not blame God for defective creation. To do so would be sacrilegious. Instead, like most infertile Muslim men, he views God as the great "decider"—the one who makes pregnancy and childbirth possible when the time is right, even in cases of recalcitrant infertility. For pious Muslims such as Ibrahim and Nura, these religious theodicies about infertility and its God-given solution are what keep them going, including through multiple painful cycles of ICSI. Only God can grant children to the infertile, as long as the infertile themselves remain faithful, patient, and active seekers of medical remedy.

In the Muslim world, infertile men and women often speak about their deep faith in God, sprinkling their conversations with formulaic remarks, such as "everything is from God," "only God knows," "it's in God's hands," "we're praying to God," "no one stands in the way of God," "God grants

children," and "it's our *nasib* [fate]." For example, a Lebanese man with an infertile wife told me, "We believe that everything is in God's hands. You get up in the morning, and then three weeks later, your wife is pregnant. If it's meant to be, it's meant to be." Another Lebanese man, who was himself infertile, had more to say about God's role in earthly life,

Every problem is from God. If you go to any company and you do not find good work, it's from God. In Islam, when the baby is born, it is God who gives him his life. Everything in his life is from God; it's written before he is born. If the weather is bad, it's from God. In the end, God is responsible for all things. He brings everything. We can't say, "This one is going to be poor, this one is going to be rich, this one a doctor, a professor, a worker." It is all from God.

Science and medicine are also seen as God given. Islam is a religion that is *scientifically agentive*: It encourages the use of science, medicine, and biotechnology in the face of illness and adversity.<sup>3</sup> Assisted reproductive technologies such as IVF and ICSI are seen as being created by human scientists under God's providence. The Muslim IVF physicians who employ these technologies are seen as doing God's handiwork in helping the infertile. Men in my study were adamant that physicians themselves do not have the power to "create life." Or, as one ICSI patient put it succinctly, "The doctors take the eggs and sperm and make embryos and put them back. But who makes the embryo live? It's God, of course." Another man, a highly educated engineer facing "unexplained infertility" with his wife, had this to say about God's role in medicine,

We've seen four or five doctors, and all the doctors said, "There is no single problem with you, nothing at all." All the doctors said, "It's from God." I told them, "We're talking to scientists!" But they said, "In this case, it's God." Just yesterday, Dr. [name] said, "Pray." I'm a scientist, but I'm a believer, too. The first two months, I went directly and tried science. I did everything I could do, and found no scientific explanation. So now, I will go to God, just like the doctors.

Ibrahim and Nura's dogged pursuit of ICSI must be seen in this light. As religiously faithful Sunni Muslims who have the financial means to pursue ICSI, they are obliged to keep "searching" for a remedy to their childlessness, leaving the ultimate outcome to the realm of the divine. Because IVF and ICSI are seen as God-given solutions to infertility, it is not surprising that a Middle Eastern IVF industry is flourishing. Infertile Muslims who are believers are expected to seek this biotechnological solution to their childlessness. The Muslim demand for these technologies is reflected in growing Middle Eastern supply-side metrics: Turkey now has more than 110

IVF clinics;<sup>4</sup> Iran has more than 70;<sup>5</sup> Egypt has more than 50; and Lebanon, with its tiny population of 4 million, has more than 15 clinics, one of the highest per capita numbers in the world. IVF clinics can be found in virtually every Middle Eastern country, from Morocco in the west to the small, petro-rich Arab Gulf states in the east.<sup>6</sup> This birth of a thriving Middle Eastern IVF sector is also clearly tied to Islam's inherent pronatalism: the Islamic scriptures encourage the growth of an Islamic "multitude."<sup>7</sup> Hence, the use of biotechnologies to assist in the conception of human life has implicit appeal in the Muslim world.

However, the Middle East cannot be called the "Wild East" of assisted reproduction (as the United States is called the "Wild West" of this industry). Although these technologies have been embraced by Islamic authorities, clear limits have also been set for infertile Muslim couples. Specifically, the Sunni Islamic authorities refuse any form of third-party reproductive assistance, including gamete donation, embryo donation, and surrogacy. These technologies have been compared to adoption, which is also illegal in Islam. The Islamic injunctions against sperm donation and adoption underlie Ibrahim's refusal to consider nonbiological fatherhood. To understand the high premium based on biological paternity, it is necessary to examine the contemporary *fatwas* that have ruled on these technologies, effectively banning the use of third parties for Sunni Muslims such as Ibrahim and Nura. It is also important to explore the subsequent bioethical and legal rulings that are being issued to enforce these *fatwa* rulings in some Middle Eastern countries. Furthermore, it is crucial to investigate the convergences and divergences between "official" interpretations of Islam as manifest in *fatwas* issued by renowned Muslim clerics and the "unofficial" discourses and practices of Muslim men and women such as Ibrahim and Nura, who are forced to grapple with infertility in reality.

My goal in this chapter is to explore the moral dimensions of assisted reproduction in the Muslim Middle East, where religion has guided clinical norms and shaped the assisted reproduction experiences of infertile couples.<sup>8</sup> For religiously pious Muslims, both Sunni and Shia, making a test-tube baby within the permissible bounds of the religion is a matter of grave importance. Even today—nearly thirty-five years after the birth of the first IVF baby in Britain, and twenty-five years after the birth of the first Muslim IVF baby in Egypt—infertile Muslim couples considering the use of assisted reproductive technologies turn to religious authorities for guidance. To that end, they tend to seek out the *fatwas* that have been issued on assisted reproduction.

A *fatwa* is a nonlegally binding but authoritative Islamic religious opinion, offered by an Islamic cleric who is considered to be an expert concerning the Islamic scriptures and jurisprudence.<sup>9</sup> *Fatwas* can be issued by a

cleric privately, for example, in response to an individual's specific question. *Fatwas* can also be issued as public statements (e.g., in the media) by individual clerics, or by *fatwa*-issuing councils of clerics within religious universities and special institutions set up specifically for this purpose. For example, in Egypt, the ancient and renowned religious university, Al Azhar, is considered the authoritative source for *fatwas*. In recent years, many *fatwas* on a wide variety of reproductive health issues have been issued by Al Azhar and by *fatwa*-granting institutions in other Muslim countries.<sup>10</sup> These *fatwas* are now disseminated through a variety of means, including religious institutions (e.g., the *fatwa* offices of religious universities or the administrative offices of various religious leaders), books, infertility clinics, and now the Internet, where a great deal of information on Islamic principles and teachings may be found. Today, there are many ways for Muslims to access *fatwas* on reproduction and other topics, including through media channels, printed collections of clerics' *fatwas*, and Web sites maintained by clerics' offices. In addition, individuals may place direct queries to those offices, either in person or through telephone, fax, email, or Web sites. In some cases, they may meet directly with a cleric to make a personal inquiry and receive an expert opinion. Once received, the very pathways through which these *fatwas* are circulated, borrowed, redeployed, and interpreted by followers—particularly in the era of the Internet—are complex and convoluted. In the end, what religious clerics mandate through their *fatwas* may or may not be realized, understood, accepted, or actualized in daily life.

In general, *fatwas* issued across the Muslim world have been permissive regarding the practice of IVF and ICSI, considering these technologies to be an acceptable solution to marital infertility and childlessness. But as we shall see in this chapter, major divergences have occurred in the *fatwas* being issued by Sunni and Shia religious authorities regarding the permissibility of third-party reproductive assistance. In recent years, new *fatwas* emerging from the Shia world have condoned third-party gamete donation, whereas gamete donation continues to be banned across the Sunni Muslim countries.<sup>11</sup> These divergent Sunni and Shia Islamic approaches toward gamete donation have affected the moral decision making of infertile Muslim couples in ways that are only beginning to be realized.<sup>12</sup>

#### SUNNI ISLAM AND ASSISTED REPRODUCTION

Sunni Islam is the major branch of the religion. Of the world's 1.6 billion Muslims, 80 to 90 percent are Sunni Muslims. Egypt is a case in point: Of its nearly 80 million people, approximately 90 percent are Sunni Muslims,

with a 10 percent Coptic Orthodox Christian minority. Sunni-dominant countries are found across North Africa (Morocco, Algeria, Libya, Tunisia, Egypt, Sudan); through most of the Arab Gulf states, including Saudi Arabia, where a very conservative form of Sunni Islam is practiced; across the Levantine countries of Syria, Jordan, and Palestine; and in the non-Arab country of Turkey. The remaining Middle Eastern countries have a mixture of Sunni and Shia Muslims, as well as Christian minority populations.

IVF was first practiced in the Sunni-majority countries of Egypt, Saudi Arabia, and Jordan, where IVF clinics opened simultaneously in 1986. Egypt's early entrance into assisted reproduction was especially important from a religious standpoint, because the *fatwa* condoning IVF came directly from Egypt's famed religious university, Al Azhar, widely regarded as the seat of Sunni Islamic learning. The Grand Shaykh of Al Azhar issued the first widely authoritative *fatwa* on assisted reproduction, which is reprinted in its entirety in the appendix to this book. The *fatwa* was issued on March 23, 1980—only two years after the birth of the first IVF baby in England but a full six years before the opening of Egypt's first IVF center. More than thirty years later, this original *fatwa* has proved to be enduring. It has subsequently been reendorsed by the Al Azhar clergy and reissued in 1991, 1997, and 2000 during conferences on assisted reproduction organized by Al Azhar's International Islamic Center for Population Studies and Research.<sup>13</sup> In addition, the Egyptian Medical Syndicate has based its bioethical guidelines on the Al Azhar *fatwa*. A variety of other Sunni Muslim Middle Eastern countries have followed suit: *fatwa* institutes in Saudi Arabia, Kuwait, Qatar, and the United Arab Emirates have all issued *fatwas* confirming the basic tenets of the original Al Azhar *fatwa*.<sup>14</sup>

The degree of consensus across the Sunni Muslim countries is quite striking, as are the ways in which these *fatwas* have guided the clinical practices of the Middle Eastern IVF community. The content of the Al Azhar *fatwa* on assisted reproduction has been made known to the Middle Eastern medical community through the writings of Gamal I. Serour, one of three founding members of the first Egyptian IVF center, a professor of obstetrics and gynecology at Al Azhar University, the director of Al Azhar's International Islamic Center for Population Studies and Research, and the president of the International Federation of Gynecology and Obstetrics (FIGO). In a series of major articles published between 1990 and 2008,<sup>15</sup> Serour has spelled out the main points of the Sunni Islamic position on assisted reproduction. Sunni Islamic authorities have agreed that the following ten technologies are *halal*, or religiously permitted:

1. Artificial insemination with the husband's semen is allowed, and the resulting child is the legal offspring of the couple.

2. In vitro fertilization of an egg from the wife with the sperm of her husband, followed by the transfer of the fertilized embryo(s) back to the uterus of the wife, is allowed, provided that the procedure is indicated for a medical reason and is carried out by an expert IVF physician.
3. An excess number of fertilized embryos can be frozen through cryopreservation. The frozen embryos are the property of the couple alone and may be transferred to the same wife in a future frozen cycle but only during the duration of the marriage contract.
4. Sperm or gonads may be cryopreserved before exposure to radiotherapy or chemotherapy and used later in life by the same individual who has survived cancer treatment.
5. Pregnancy in postmenopausal women is allowed using a woman's own cryopreserved embryos, oocytes, or, in the future, ovaries.
6. Multifetal pregnancy reduction (a.k.a. selective reduction) is allowed if the prospect of carrying twins or a high-order multiple pregnancy (HOMP, i.e., triplets or more) to viability is very small. It is also allowed if the health or life of the mother is in jeopardy. As a form of selective abortion, the intention is to preserve the life of the remaining fetuses and minimize complications for the woman.
7. PGD is allowed and even encouraged, where feasible, as a diagnostic option to avoid clinical pregnancy terminations among couples at high risk of genetic disorders in their offspring. PGD may also be used in cases of "family balancing," when couples have children of only one sex.
8. Embryo research, for the advancement of scientific knowledge and the benefit of humanity, is allowed for fourteen days after fertilization on surplus embryos that are donated for research with the informed consent of the couple. These research embryos should not be returned to the woman's uterus.
9. In the future, gene therapy may be approved, not to promote genetic advantage or privilege in offspring but rather to remediate genetically or otherwise physically inherited genetic diseases and pathological conditions.
10. In the future, uterine transplantation will be allowable as a remedy for women who are lacking a competent uterus. The transplanted uterus may be obtained from a postmenopausal donor or a woman of childbearing age who has completed her family. Uterine transplantation has been performed in the Middle East (i.e., Saudi Arabia), but to date, a viable pregnancy in a transplanted uterus has yet to occur.

However, the Sunni Muslim countries of the Middle East cannot be described as an "anything goes" environment. The Sunni religious authorities have not condoned every possible assisted reproduction practice. The list of technologies that are *haram*, or religiously forbidden, is almost as long:

1. No third party should intrude into the marital functions of sex and procreation, because marriage is a contract between the wife and husband. This means that a third-party donor is not allowed, whether he or she is providing sperm, eggs, or embryos. The use of a third party is tantamount to *zina*, or adultery.
2. All forms of surrogacy—both "traditional," using the surrogates own eggs, and "gestational," using embryos transferred to the surrogate's uterus—are forbidden. Although initially allowed by a Saudi Arabian-issued *fatwa* in cases of polygyny (i.e., one wife serves as the surrogate for another), this approval of surrogacy was withdrawn within one year (1984–85), before assisted reproduction was ever carried out in the Middle East.
3. A donor child conceived through any of these illegitimate forms of assisted reproduction cannot be made legitimate through adoption. The child who results from a forbidden method belongs to the mother who delivered him or her. He or she is considered to be a *walad al-zina*, or an illegitimate child.
4. Establishment of sperm banks is strictly forbidden. Sperm donation threatens the existence of the family and the human race and should be prevented.
5. If the marriage contract has come to an end because of divorce or death of the husband, assisted reproduction cannot be performed on the ex-wife or widow using sperm from the former husband (i.e., posthumous assisted reproduction).
6. PGD or sperm sorting techniques for the purposes of sex selection are forbidden, so as to avoid discrimination against either sex, but particularly the female child.
7. Genetic alteration of embryos is forbidden.
8. Reproductive cloning for the creation and birth of a cloned child—who would be the genetic twin of the cloning parent—is forbidden.

Furthermore, it is important to note that physicians are considered the only qualified personnel to practice assisted reproduction in all its permitted varieties. If a Muslim physician were to perform any of the aforementioned forbidden techniques, he or she would be considered guilty of a crime, his or her earnings would be sequestered, and authorities would be required to stop him or her from the morally illicit practice, including through imprisonment and even death.<sup>16</sup>

Clearly, these decisions about which technologies and techniques are *halal* (permitted) and which are *haram* (forbidden) bear considerable weight in Sunni Islam. Most important from a Sunni Islamic perspective, IVF and ICSI are *halal*, as long as the gametes come from a currently married husband and wife. However, third-party donation is *haram*, whether using donor gametes, embryos, or a surrogate womb. As noted by Islamic studies scholar Ebrahim Moosa,

In terms of ethics, Muslim authorities consider the transmission of reproductive material between persons who are not legally married to be a major violation of Islamic law. This sensitivity stems from the fact that Islamic law has a strict taboo on sexual relations outside wedlock (*zina*). The taboo is designed to protect paternity (i.e., family), which is designated as one of the five goals of Islamic law, the others being the protection of religion, life, property, and reason.<sup>17</sup>

Accordingly, at the ninth Islamic law and medicine conference, held under the auspices of the Kuwait-based Islamic Organization for Medical Sciences (IOMS) in Casablanca, Morocco, in 1997, a landmark five-point declaration included recommendations to prohibit all situations in which a third party invades a marital relationship through donation of reproductive material. Such a ban on third-party reproductive assistance is effectively in place in the Sunni-dominant countries. In the same year as the IOMS declaration was issued, a global survey of sperm donation among IVF clinics in sixty-two countries provided some indication of the strength of this anti-donation stance.<sup>18</sup> In all of the Sunni-dominant Muslim countries surveyed—including the Middle Eastern countries of Egypt, Kuwait, Jordan, Morocco, Qatar, and Turkey, as well as a number of non-Middle Eastern Muslim countries including Indonesia, Malaysia, and Pakistan—sperm donation and all other forms of gamete donation were strictly prohibited. As the authors of this global survey stated, "In many Islamic countries, where the laws of Islam are the laws of the state, donation of sperm was not practiced. AID [artificial insemination by donor] is considered adultery and leads to confusion regarding the lines of genealogy, whose purity is of prime importance in Islam."<sup>19</sup>

The statement "the laws of Islam are the laws of the state" bears further investigation, for it is not, technically, accurate. Islamic law, which is called *shari'a*, governs family law (i.e., personal status law) in most Middle Eastern societies. However, separate civil legal codes, often imposed during periods of French and British colonial rule, govern most other areas of law throughout the region.<sup>20</sup> Assisted reproduction would come under the aegis of Islamic family law, given that assisted reproductive technologies are used to produce families for infertile couples. The association of assisted reproduction with Islamic *shari'a* has given religion outstanding power to

dictate the scope and contours of clinical practice in the Muslim world, effectively weakening state intervention or civil law in this area. In fact, state laws on assisted reproduction are relatively rare in the Middle East, found only in Turkey, Iran, and more recently, the Arab Gulf. Furthermore, even though assisted reproduction is subject to Islamic *shari'a*, it is actually the Middle Eastern medical community—not the *shari'a* courts—that must enforce the Islamic *fatwa* rulings on these technologies.

Egypt is a case in point. Over the past twenty-five years, Egypt has supported a thriving assisted reproduction sector, with more than fifty IVF clinics. Five of these clinics are located in government hospitals and receive some state funding to offset expenses for the infertile poor.<sup>21</sup> However, as in most Middle Eastern countries, Egypt's IVF industry is highly privatized and exists beyond the official gaze of the state. Opening an IVF clinic requires licensure by the Egyptian Ministry of Health, based on guidelines set forth by the Egyptian Medical Syndicate. However, no laws of any kind have been passed to control clinical practice. Gamal Serour, for one, laments the relative lack of Egyptian state involvement in this process. "Unfortunately, there have not been any attempts to legislate IVF in Egypt," he writes. "The state controls the practice of IVF through licensing these centers. Centers have to abide by the guidelines laid [out] by the medical syndicate concerning premises, personnel, equipment, facilities, sterilization, etc. Every center must obtain approval of the medical syndicate followed by a license from MOH [Ministry of Health] before they start their programs." However, he adds, the "regulations environment in Egypt is poor. It stops at the phase of issuing a license. There is no regulatory body which supervises or inspects the work done; neither is there an obligatory registry for compiling data. Of course, inspection occurs whenever a catastrophe occurs."<sup>22</sup> Concurring completely with this assessment, Mohamed Yehia, a professor of obstetrics and gynecology at Ain Shams University in Cairo and director of a major IVF clinic there, describes the regulatory environment in Egypt as "very loose and mainly governed by the doctor-patient relationship."<sup>23</sup>

The fact that, in practice, doctors and clinics operate with little government interference does not mean that "anything goes" in either Egypt or other Sunni Muslim countries. In fact, what is quite remarkable is the degree to which the *fatwa* banning third-party donation is actually followed by both practitioners and patients in the Sunni Muslim world. Sunni Muslim physicians in the Middle East appear loath to offer gamete donation to their patients. According to them, clinics in the Sunni-dominant countries simply do not use donor technologies, which violate the *shari'a* guidelines. Instead, if couples with recalcitrant infertility ask about gamete donation, they are either discouraged by their physicians from pursuing it further or are referred out of the country, primarily to Europe. According

to Yehia, third-party donation is "not even thought about in Egypt," and a recent discussion of gestational surrogacy ended in another Al Azhar *fatwa* banning it.

In summary, in the Sunni-majority countries of the Middle East and the rest of the Sunni Muslim world, prohibitions against gamete donation are effectively in place. Sometimes these prohibitions are enacted in law (e.g., Turkey, UAE), sometimes in professional codes of medical ethics (e.g., Egypt), but more commonly through broad ministerial decrees that are "heavily influenced by the statements of Sunni religious scholars."<sup>24</sup> As a result, third-party reproductive assistance of all kinds (gamete donation and surrogacy) is not practiced in the Sunni Muslim world, with clinics turning away (or referring to other Euro-American countries) couples who require these services.

#### SHIA ISLAM AND ASSISTED REPRODUCTION

The situation is changing for Shia Muslims, whose leading clerics have taken a radical step in a new direction. Shia is the minority branch of Islam, constituting slightly more than 10 percent of the world's Muslim population. Iran is the current demographic epicenter of the Shia world, with one-third of the global Shia population. Shia majorities are found not only in Iran but also in Iraq and Bahrain, and significant Shia minority groups are found in eastern Saudi Arabia, Syria, Turkey, as well as Afghanistan, Pakistan, and India. In Lebanon, Shia Muslims are thought to dominate the Muslim population in this otherwise religiously heterogeneous country. Obviously, Shia Islam has drawn considerable attention because of the U.S.-led war in Iraq and ongoing tensions between the United States and Iran.

Initially, many Shia religious authorities supported the majority Sunni Islamic view: namely, they agreed with Sunni *fatwas* that prohibit third-party reproductive assistance. However, in 1999, the supreme leader of the Islamic Republic of Iran, Ayatollah Ali Hussein al-Khamene'i (figure 12), the handpicked successor to Iran's Ayatollah Khomeini, issued a *fatwa* effectively permitting donor technologies to be used. (See the appendix for a full transcription of his *fatwa*.)

With regard to egg donation, Ayatollah Khamene'i stated in his *fatwa* that egg donation "is not in and of itself legally forbidden." But he stated that *both* the egg donor and the infertile woman must abide by the religious codes regarding parenting. Thus, the child of the egg donor has the right to inherit from her, as the infertile woman who received the eggs is considered to be like an adoptive mother (through breastfeeding-related "milk kinship").

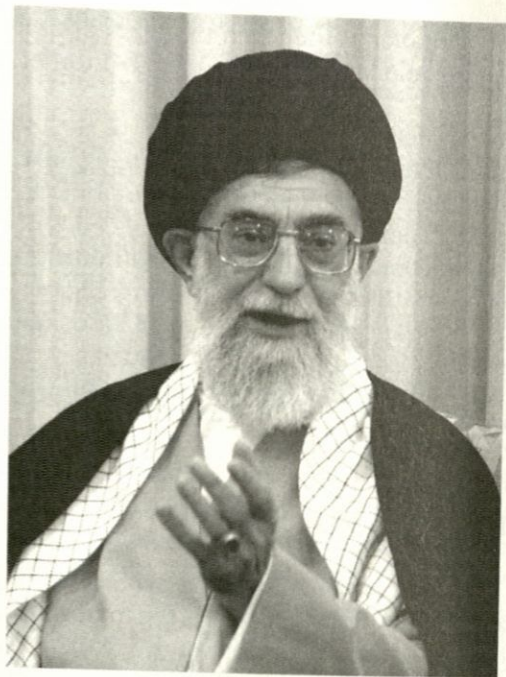


FIGURE 12. Media image of Ayatollah Ali Hussein al-Khamene'i. Atta Kenare/AFP/Getty Images

With regard to sperm donation, Ayatollah Khamene'i said in his *fatwa* that the baby born of sperm donation will follow the name of the sperm donor and can inherit only from him, since the infertile man is considered to be like an adoptive father.

However, the situation for Shia Muslims is actually much more complicated than this, given two religious practices called *ijtihad* and *mut'a*. Shia religious authorities give considerable precedence to a form of individual religious reasoning known as *ijtihad*, through the use of 'aql, or intellectual reasoning. There is also a strong tradition of *ijtihad* in Sunni Islam. However, Shia Muslims pride themselves on the greater freedom of their religious authorities to exercise *ijtihad*,<sup>25</sup> often claiming that Sunni Muslims in general—both clerics and laypersons—tend to favor scriptural sources over individual moral reasoning. Through these practices of *ijtihad*, various Shia clerics have come to their own conclusions regarding the rightness or wrongness of gamete donation. Some Shia clerics continue to prohibit gamete donation for their followers, while others have allowed it under certain conditions. As many scholars of Shia Islam have noted, the practice of *ijtihad* has allowed a certain flexibility and pragmatism toward new technological developments, including IVF, ICSI, and a number

of other new medical technologies (e.g., contraception, organ transplants, vasectomy, transgender surgery).<sup>26</sup> Furthermore, *ijtihad* has ultimately led to great heterogeneity of opinion and practice *within* the Shia community.

Additionally, Shia Islam allows a form of temporary marriage called *mut'a* (also called *sigheh* in Iran), which is not recognized by Sunni religious authorities.<sup>27</sup> In Shia Islam, *mut'a* is a union between an unmarried Muslim woman and a married or unmarried Muslim man, which is contracted for a fixed time period (e.g., one hour to ninety-nine years) in return for a set amount of money. It is practiced in Iran, as well as in other parts of the Shia world.<sup>28</sup> In the past, middle-aged and older women who were divorced or widowed often engaged in *mut'a* marriages for financial support (and, presumably, sexual pleasure). However, in Iran, following the loss of men during the devastating, eight-year Iran-Iraq war, former Iranian president Rafsanjani recommended *mut'a* as a means of protecting the large numbers of single or widowed women who had no other means of financial support. For Shia men, *mut'a* marriages can be contracted while traveling, or as a means of achieving marital variety and sexual pleasure.<sup>29</sup> Furthermore, young unmarried Shia men and women sometimes contract *mut'a* marriages as a way of gaining sexual experience, or as a way of being together as a "couple" (i.e., boyfriend-girlfriend) without the heavy financial commitment of a formal marriage. In Iran, a kind of legalized prostitution is also made possible through the mechanism of *mut'a*; with *mut'a* marriages enacted privately between prostitutes and their customers, these sexual encounters are made morally licit.

Clearly, *mut'a* marriages have a variety of purposes. However, since the permission of donor technologies by Ayatollah Khamene'i, *mut'a* has also been invoked to make egg donation legal within the parameters of marriage. As shown in anthropologist Morgan Clarke's recent path-breaking book, *Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon*,<sup>30</sup> Ayatollah Khamene'i himself does not stipulate *mut'a* marriage as a requirement for gamete donation, for he believes that *zina* (adultery) requires the physical act of intercourse. However, other Shia clerics disagree. Among Shia authorities, major debates revolve around ten key questions:

1. Should any form of third-party reproductive assistance, including gamete donation, embryo donation, or surrogacy, be allowed at all?
2. Does gamete donation constitute *zina*, if no "touch or gaze" takes place?
3. Should sperm donation be allowed, even if egg donation is made legal?

4. Should the child born of a sperm donor follow the name of the infertile father or the sperm donor?
5. Should such a child inherit from the infertile father or the sperm donor?
6. Are donor children related to the infertile parent who accepted donation, and, if not, could they potentially marry each other, which has implications for proper comportment in domestic life (e.g., bathing, veiling, exposure to each other's nakedness, etc.)?
7. Is donation permissible at all if the donors are anonymous?
8. Should a financial transaction be allowed between gamete donors and recipients?
9. Does the husband of an infertile woman need to do a *mut'a* marriage with the egg donor, then release her from the *mut'a* contract after the embryo transfer (usually two to five days following fertilization of the eggs), in order to avoid *zina*?
10. Can the wife of an infertile husband enact such a *mut'a* marriage?

In order for a married woman with an infertile husband to enact a *mut'a* marriage with a sperm donor, five separate steps would be necessary:

1. "Temporary divorce" of the infertile husband;
2. *Mut'a* marriage to the sperm donor;
3. Establishment of a pregnancy with the sperm donor "husband";
4. Ending of the *mut'a* marriage contract with the sperm donor after the pregnancy is established at three-and-a-half months (i.e., *'idda*, the period required to establish the pregnancy);
5. Remarriage to the infertile husband.<sup>31</sup>

Clearly, the complexities of the Shia religious discourse surrounding third-party donation are rather mind-boggling, given the expansive possibilities presented by both *ijtihad* and *mut'a*. According to Shia religious authorities I interviewed in Lebanon—who accepted the idea of donation, but were strict in their interpretation of how donation should be practiced—a variety of steps should be followed prior to any donation decision:

1. When a donor is needed, a couple should go to a Shia *shari'a* court, where a decision can be made on a case-by-case basis.
2. There should be a determination about which major Shia cleric—or *marja' al-taqlid*, literally, "source of emulation"—the infertile couple follows, to make sure that the particular cleric allows for third-party donation.
3. If so, the decision to donate should be made in the presence of witnesses, the IVF doctor, and with the agreement of both parties (the infertile couple and the donor).
4. Furthermore, strictly speaking, the husband should marry the egg donor for the period of time in which the whole procedure (egg

retrieval to embryo transfer) is taking place, thereby avoiding the implications of *zina*. Polygyny, after all, is legal in all branches of Islam.

However, polyandry—or marriage of a woman to more than one husband simultaneously—is definitely illegal in Islam, in both the Sunni and Shia variants. Therefore, the majority of Shia clerics cannot abide by a married Shia Muslim woman contracting a *mut'a* marriage with a sperm donor. This is true even if she divorces her infertile husband, temporarily marries the sperm donor, and then remarries her infertile husband. In theory, sperm donation might be possible for a widowed or otherwise single woman. However, so far, no Muslim clerics, Shia or Sunni, have accepted this possibility. In the Muslim countries, single motherhood of a donor child is unlikely to be socially acceptable, now or in the future. The child born of a sperm donor to a single woman would be considered a *walad al-zina*, literally, "son of illicit sex," or an out-of-wedlock bastard, without a family name and without a father.

Having said this, divergent gamete donation attitudes and practices have emerged in the Shia Muslim world, as religious authorities come to their own *ijtihad*-driven conclusions about third-party donation in all of its varieties. These divergences of opinion are playing out in interesting ways. For example, Sayyid Muhammad Husayn Fadlallah—Lebanon's most prominent Shia religious authority, up until his untimely death on July 4, 2010—did not agree with Ayatollah Khamene'i's permission of sperm donation and did not condone the use of *mut'a* marriage for women with

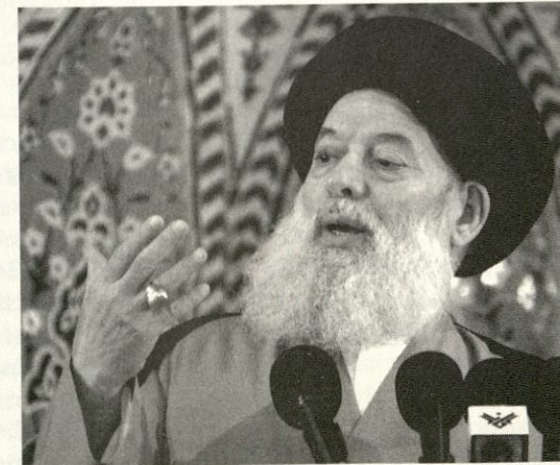


FIGURE 13. Media image of Sayyid Muhammad Husayn Fadlallah, before his death on July 4, 2010. Ramzi Haidar/AFP/Getty Images

infertile husbands to solve the *zina* issue through temporary marriage to a sperm donor (figure 13).<sup>32</sup>

When I arrived in Lebanon to carry out my research, there was a fundamental rift in opinion between those Shia Muslim men who followed the teachings of Sayyid Fadlallah and members of Hizbullah who followed the guidance of Ayatollah Khamene'i in Iran. When I began my study, Sayyid Fadallah agreed with the dominant Sunni Islamic ban on gamete donation and adoption. In a report entitled "IVF in Lebanon: Assessment of Its Current Status," which was sponsored by the American University of Beirut (AUB) medical school, Sayyid Fadlallah and a leading Lebanese Sunni cleric expressed their views on gamete donation in assisted reproduction.<sup>33</sup> Summarizing the two clerics' positions, the AUB report explains:

To assess the Islamic point of view regarding this issue . . . both agreed that Islam has no objection against any kind of assisted reproduction as long as the parent male and female are the providers of the sperm and egg. . . . Regarding heterologous assisted reproduction, both the Sunnite and the Shiite figures agree that it is *absolutely forbidden* to borrow sperms or eggs from a person other than the involved couple because of the following reasons: 1) The use of sperm from a male other than the husband to inseminate the egg of the wife is seen as an act of adultery because the husband will not be the true biologic father. The same applies in the case of a donor egg. It is of importance to note that polygamy can offer a solution in case of female sterility; 2) The identity of the child will be jeopardized concerning the issues of heritage, life, death and others; 3) This will impose a tremendous social and psychological burden on the infertile male or female partner having to raise a child not of his or her own flesh and blood. Note that in Islam adoption is not allowed and that the adopted child will always be considered a stranger to the (parent) of the opposite sex.<sup>34</sup>

However, Sayyid Fadlallah was one of the only Muslim authorities at that time—either Shia or Sunni—to condone human reproductive cloning as a solution to infertility.<sup>35</sup> Sayyid Fadlallah argued that cloning has great potential in the Muslim world, given that it bypasses sexual reproduction and, hence, concerns about *zina* (or reproduction outside of wedlock). Nonetheless, today, following the death of Sayyid Fadlallah, Muslim religious leaders continue to debate the pros and cons of reproductive cloning, and no authorities except for Ayatollah Khamene'i have come forward to openly encourage human cloning for infertile Muslim couples.<sup>36</sup> Furthermore, worldwide ethical objections to human cloning have put the science "on hold"—although not for other mammals, such as Dolly the sheep.<sup>37</sup>

It is also important to note that Sayyid Fadlallah's position opposing sperm donation squares with the dominant religious discourse in Iran.

Namely, a law on embryo donation passed in 2003 in the Iranian parliament (*majlis*) and approved by the Guardian Council (i.e., a religious "watchdog" body that endorses every bill before it becomes law) has restricted gamete donation to married persons.<sup>38</sup> Even though the law is brief (less than one page), it states clearly and succinctly who can and cannot donate and receive gametes. Egg donation is allowed, as long as the husband marries the egg donor temporarily—thereby ensuring that all three parties are married. Sperm donation, on the other hand, is forbidden, because a sperm donor cannot temporarily marry an already married woman whose husband is infertile. However, quite interestingly, embryo donation—which involves both sperm and egg from another couple—is allowed in order to overcome both male and female infertility. Because an embryo comes from a married couple and is given to another married couple, it is considered *halal*, or religiously permissible.

The social and biological implications of embryo donation are quite interesting. For Iranian couples unable to produce a child because of male infertility, embryo donation allows them to bypass the problem of the husband's weak (or absent) sperm. However, embryo donation does *not* allow a presumably fertile wife of an infertile husband to contribute her own ova, in effect severing her biological ties to the donor child. Furthermore, and most strikingly, embryos donated from another married couple involve *both* egg and sperm donation. In sperm donation, another man's sperm are injected directly into the wife's womb or oocytes. Embryo donation avoids this direct insemination. Nonetheless, embryo donation still disrupts male paternity, because it involves the acceptance by an already married woman of another man's (and woman's) gametes. Furthermore, a woman's acceptance of another woman's egg is effectively like traditional surrogacy, which is strictly prohibited in Sunni Islam. However, gestational surrogacy is now being openly practiced in Iran, despite the lack of firm legislation.<sup>39</sup>

According to Islamic law, a child should inherit only from the biological parents (in this case, the embryo donors). However, under the circumstances of third-party donation in Iran, biological parenthood is not considered sufficient to establish a parental relationship or inheritance duties. In such cases, it is recommended that the recipients of the gametes make a legal commitment to take custody of the child and to specify in their wills that the child will be given the same proportion of the assets as a natural child would inherit.<sup>40</sup> Thus, infertile parents are akin to adoptive parents, with custody over the donor child. The donor child inherits from the infertile parents, as the donors usually remain anonymous throughout the child's lifetime.

Despite the widespread practice of anonymous, commercial, third-party donation in Iran, there are clinical and legal efforts to provide some donor screening. The Iranian law states that the donor should be married, legally

and religiously, and should undergo medical testing for physical and mental health, IQ tests for normal intelligence, and screening for drug and alcohol addiction. Because of uncertainties about anonymous donors, donation between kin, especially sisters, remains common and is even preferred by many couples in Iran.<sup>41</sup> The same is true of "sister surrogacy." Iranian anthropologist Shirin Garmaroudi found that gestational surrogacy, in which relatives are sometimes used as surrogates, is becoming increasingly popular in Iran. Among the majority of Shia religious authorities, it is an acceptable form of assisted reproduction.<sup>42</sup>

Whether the future implications of widespread third-party donation and surrogacy have been carefully thought through by the religious and legal authorities in Iran is unclear. Based on her path-breaking research carried out in Iranian IVF clinics, anthropologist Soraya Tremayne notes,

In reality the lack of clarity in religious rulings has left a wide gap in the ethical, moral and legal aspects of the practice of ARTs [assisted reproductive technologies]. The overall protection that such approvals provide, inadvertently has created a confusing situation for medical practitioners, who, in their everyday practices face complex situations which are not covered by religious rules. . . . But as these gaps emerge, and the medical practitioners, cooperating closely with the "liberal" religious rules, try to close them, the balance of power has gradually shifted in favor of biomedical knowledge as the determining and authoritative source of wisdom as far as ARTs are concerned.<sup>43</sup>

It is important to note that not all Shia clerics are "liberal" when it comes to gamete donation. Some Shia religious leaders both inside and outside of Iran do not agree with the relative Iranian "permissiveness" toward third-party reproductive assistance. Instead, they abide by the dominant Sunni Muslim ban on all forms of third-party donation. For example, in 2006, both Soraya Tremayne and I attended a two-day conference in Tehran on "Embryo and Gamete Donation," sponsored by the Avesina Research Institute in association with the Law and Political Science Faculty of University of Tehran.<sup>44</sup> The conference provided a fascinating example of the kind of rigorous debate that is the norm in Islamic jurisprudence.<sup>45</sup> For example, some clerics, dressed in their stately robes and turbans (black for the *sayyids*, or descendants of the Prophet Muhammad), argued against the moral permissibility of embryo and gamete donation, while others argued for it. As an example of "*ijtihad* in action," the disagreements generated in public between "pro" and "con" clerics were also debated in the more private recesses of the conference. For example, a Shia *shari'a* judge from Bahrain, who was staying at our guest residence, took great pains to describe to me his opposition to all forms of gamete donation. To prove this

point, he provided me with a copy of his book on Islamic personal status law, which had been translated into English and which supported his anti-gamete donation position based on evidence from the traditional Islamic scriptures. According to him, Iranian clergy, who speak Farsi rather than Arabic, are not as familiar with the original Islamic scriptures (in Arabic) that demonstrate the immorality of third-party donation. Thus, in his view, some Iranian clergy are "innovating" in ways that are religiously unacceptable, and which are at odds with the rest of the Muslim world.

Indeed, the degree to which some Shia clergy are "pushing the envelope" in the realm of reproductive science and technology is quite remarkable.<sup>46</sup> At the gamete donation conference in Iran, some Iranian clergy and physicians advocated for future laws permitting all forms of donation (including sperm donation), as well as surrogacy. Meanwhile, despite the existence of a restrictive embryo donation law, many IVF physicians in Iran continue to practice egg donation, sperm donation, and surrogacy without fear of punishment. In Iran, the original "permissive" *fatwa* of Ayatollah Khamene'i—who is, after all, the supreme leader of the Islamic Republic of Iran, even if he is not regarded as the most brilliant intellect and legal thinker<sup>47</sup>—provides adequate moral justification for donor technologies and surrogacy to be practiced quite openly. As of this writing, Ayatollah Khamene'i is the only major Muslim cleric who has allowed all forms of gamete donation, embryo donation, surrogacy, and human cloning. As a result, since the new millennium, third-party reproductive assistance of all kinds (with the exception of human cloning, which is not yet possible) is now widely available in IVF clinics in Iran, with its Shia Muslim majority.

#### THE "IRANIAN ART REVOLUTION" IN LEBANON

This "Iranian ART revolution"<sup>48</sup> has had its most dramatic impact in Lebanon. There, Ayatollah Khamene'i's pro-donation rulings have effectively "opened the door to donation." Thousands of Hizbullah sympathizers in Lebanon follow the spiritual guidance of Ayatollah Khamene'i in Iran. By the year 2000, Lebanon—where the majority of Muslims are thought to be Shia, even though the country's last official census was conducted in 1932<sup>49</sup>—had become the only other country in the greater Muslim world to offer third-party reproductive assistance. As of this writing, Iran and Lebanon are still the only two Muslim-majority countries to offer donation and surrogacy to infertile Muslim couples.

As soon as I arrived in Lebanon in January 2003, it became clear to me that Muslim men's attitudes toward third-party reproductive assistance depended largely on their positionality vis-à-vis Islam. A man's "Islamic masculinity"<sup>50</sup> truly mattered in this regard: namely, whether a man ac-

cepted the idea of third-party donation depended upon the Muslim community to which a man belonged by birth, whether a man identified with that community, and what kind of Muslim man each person chose to be as an adult.

Most practicing Muslim men in my study had definite attitudes toward donation. Sunni Muslim men such as Ibrahim, whose story of failed ICSI opened this chapter, tended to reject all forms of third-party donation. Many Shia Muslim men did as well. However, as I was soon to discover in Lebanon, attitudes toward donation among Shia men depended largely on which cleric they followed as their *marja' taqlid*, or source of emulation.

Of the 220 men in my Lebanese study, the largest group (76 men, or 35 percent) identified themselves as Shia. However, many claimed that they were "not that religious," did not "care about religion," did not follow a *marja'*, or were anticlerical (one explicitly and vehemently so). A few of these men described themselves as "Shia by birth" but objected to providing a sectarian label, because they were either nonpious, self-proclaimed Communists or politically opposed to sectarian division in the country. In fact, there was a significant degree of secularism among this population of men. Such secularism in the Muslim countries is largely hidden and underrepresented but is part of the fabric of Middle Eastern religious life.<sup>51</sup>

Of the seventy-six Shia men in my study, thirty-one (40 percent) spoke at some length about their religious convictions, their attitudes toward gamete donation, and whether they followed Ayatollah Khamene'i or Sayyid Fadlallah as *marja'*. It is important to reiterate that these interviews were conducted between January and August 2003, during the initiation of the war in Iraq, and before the rise in the profile of Iraq's Ayatollah Ali al-Sistani as the most senior clerical authority in Shia Islam. At the time, none of the men in my study identified Ayatollah al-Sistani as their *marja'*, although his popularity in Lebanon has grown in the intervening years.<sup>52</sup> Rather, half of the self-identified pious Shia men in my study followed Ayatollah Khamene'i as their *marja'*. The other half followed Sayyid Fadlallah.<sup>53</sup> This division had major ramifications on men's choices about assisted reproduction in the clinic. In an early interview I conducted with a thirty-three-year-old sweet shop worker, Zaher, I asked if IVF was allowed in his religion. He explained assisted reproduction in Shia Islam in this way,

ZAHER: IVF is no problem in Islam if the man's sperm is from the husband and the eggs are her eggs, from his wife. This is *halal*. I want to tell you something about cloning in Islam. If a man has no hope to have a child, it [cloning] is *halal* for Shia. It is not *halal* if the eggs are from outside [a donor], or if the sperm is from outside. I have read extra books from certain *shaykhs* in Lebanon, and this is what they say.

ANTHROPOLOGIST: Is this new? I hadn't heard about that.

ZAHER: Yes, it's new for cloning. For the cloning, as long as there is no hope, and as long as the baby will be born without birth defects, then it's okay, for the service of humanity. It's *halal*.

ANTHROPOLOGIST: That's very interesting. Which *shaykh* allowed this?

ZAHER: As far as I know, there are two Lebanese versions of Shia. And they have different *shaykhs*. But the one I'm following is Lebanese. Another one who is followed is in Iran. I know that the *shaykh* in Iran said that you can take eggs, take sperm from outside. But I don't follow him. He said, in his opinion, in his *fatwa* in Iran, that it was allowed to do sperm and egg donation. This is due to the war in Iran, which left millions of people dead, with lots of widows. In Islam, the *shaykhs* give *fatwas* to help people. This Iranian *shaykh*, he thinks it is good, it will help these widows to have their own children. But, in Lebanon, it's a different story. In Islam, for every problem, there is a solution. Maybe in Lebanon, it is not allowed today, but they will allow it in years to come. We Shia practice *ijtihad*. This is our difference from the Sunni. We practice *ijtihad* more than the Sunni.

ANTHROPOLOGIST: So who do you follow in Lebanon?

ZAHER: Sayyid Muhammad Husayn Fadlallah. He's the most important in Lebanon. He is so open to *ijtihad*. He is open-minded.

ANTHROPOLOGIST: Is he based in Beirut?

ZAHER: He's in Beirut, but he is not only important in Lebanon. He is followed by others in the Arab world and even in Detroit, Michigan!<sup>54</sup> I know people in Detroit, Michigan who follow him. And, in his opinion, donation is *haram*, but cloning is okay. The *Sayyid* had an interview in the newspaper saying if, for a medical reason, there is no other solution [to infertility], then [cloning] is okay. Maybe later on, he will decide this for donation also.

ANTHROPOLOGIST: What do you think about [third-party] donation?

ZAHER: My wife, she was asked by the doctor if she would be willing to donate her eggs. But I asked the Sayyid—I asked him *directly*—and he said, "No." And she didn't have any extra eggs anyway. There will be something wrong if she donates and another person will receive her eggs and the baby will be half from my wife. This is a "relations problem." This is a "mixture of relations" when a baby is half from another person. And another thing he [Fadlallah] said, "If a boy is born from an egg donor, it is *haram* for that boy to be 'shown' [i.e., naked] to the [infertile] wife," because actually, he is not her boy 100%. It is everyone according to his own religion, and so if his religion allows him, he will do it and he will not be punished. But, at the end, God will punish those who will do this and don't have good faith. If you

have good faith, you wouldn't do that which is not allowed to you in your religion.

ANTHROPOLOGIST: So you're glad that Shaykh Fadlallah does not allow this?

ZAHER: Yes, he's an expert in everything, medicine, politics. You can talk to him on every subject. All ambassadors go and speak directly to him. Every day, after prayer, you can go and talk to him, and every Tuesday, he holds a meeting where you can write a question and he will answer. He's in a southern suburb, a Shia neighborhood. If you would like to meet him, I can take you there . . .

ANTHROPOLOGIST: Does he meet with women?

ZAHER: Yes, but you would have to cover your hair.

Although Zaher's spontaneous invitation for me to meet with Sayyid Fadlallah never materialized,<sup>55</sup> his comments were an invaluable entrée into the "two versions" of Shia authority operating in Lebanon at that time. According to Zaher, Sayyid Fadlallah was an "open-minded," "expert" cleric, who had approved of cloning as a solution to hopeless infertility. Nonetheless, Sayyid Fadlallah did not agree with Ayatollah Khamene'i's "permissive" position regarding third-party donation of sperm and egg. Ayatollah Khamene'i had introduced a dangerous "mixture of relations" into the Iranian—and potentially the Lebanese—population, according to Zaher.

Given these significant divergences, I began asking other Lebanese Shia men whether they followed the guidance of Sayyid Fadlallah or Ayatollah Khamene'i. Sayyid Fadlallah's followers tended to be ardent in their support for him, explaining that the "majority" of Lebanese Shia Muslims considered him to be their "own Lebanese *marja'*." Sayyid Fadlallah was praised for being a "modernist"—for approaching new issues, technologies, and social phenomena with an "open mind." He was considered a master of *ijtihad*, who could interpret new innovations for the purposes of social advancement. As one supporter of Sayyid Fadlallah explained, "If we look to religion, to Sayyid Fadlallah, he contributes to our advancement, to improving our lives. He uses *ijtihad* because things are changing. We cannot stay at the same point in time. He pushes things for our own advancement."

Assisted reproductive technologies to overcome infertility were considered to be one of these "advancements" and hence subject to *ijtihad*. Karim, a staff member at a Beirut university, explained Sayyid Fadlallah's attitude toward assisted reproduction, before explaining how this Lebanese cleric had diverged from the Iranian-backed Hizbullah, who sought the spiritual guidance of Iran's Ayatollah Khamene'i,

KARIM: In our religion, for Shia, [assisted reproductive technologies] are not a problem, because of Sayyid Fadlallah. I'm not that religious, basically. But Fadlallah said, "This is not a problem." For Shia, it's not a problem to use these technologies. I'm reading only Fadlallah. He's the only religious person I read, because I usually like more open-minded people. Although the media talk a different story, I read many things and I like Fadlallah because he is very open. I'm a man of music, I sing in Arabic, which some say is forbidden in Islam. But I know that Sayyid Fadlallah listens to music, for example, Fayrouz,<sup>56</sup> and he knows a lot of poems. He can talk to an atheist or a non-atheist and both will feel comfortable. He's the least conservative of the ones who understand *fiqh*. But, religiously, he's strict. He's abiding by the Qur'an and hadith and what the Prophet said.

ANTHROPOLOGIST: So most Shia in Lebanon follow him?

KARIM: Well, people here in Lebanon who like Iran don't like Fadlallah, because he said, "Religious leadership should be regional." For example, leaders in Iran won't understand Lebanon, so they cannot make *fatwas* for Lebanon. The leader needs to live here and know Lebanese society. This made the rift, because Hizbullah are supported by Iran. But we are Lebanese! We are not part of another country.

ANTHROPOLOGIST: And so you prefer to follow Fadlallah?

KARIM: Yes, because Fadlallah is one of those leaders who gives us an opportunity to make a step forward. He is very open in those general things, not just religious ceremonies. And his way of thinking is very good. For example, if he wants to make a *fatwa* for infertile women, he will find doctors at American University Hospital and ask them exactly what happens to women's bodies. People who are not Hizbullah men hold him in high respect because he's a very good thinker.

ANTHROPOLOGIST: And that's really important. . . .

KARIM: Yes, the Shia—this is my opinion, my understanding—the highest thing in Shia is the mind, *al-'aql*, to find out about God, the Qur'an, and anything. In Islam, there are two groups, two main groups. One uses the mind to discover Allah, and when they know Allah, this is it and you should abide by his rules and submit blindly. The other says, no, since Islam started by *al-'aql*, then we must continue to use *al-'aql*. There are certain unchanging principles in Islam, but everything else should be submitted to reason. The Sunnis are in the first group—they start by Allah and [then] they go to the Qur'an and *hadith*. But Sayyid Fadlallah, if he was given a new opportunity, he would have created a new culture where the second group would have flourished.

ANTHROPOLOGIST: But this hasn't happened?

KARIM: I think, no, because of politics. He doesn't have a political group to support him, so he's kind of alone. Hizbullah has Iranian money, while Fadlallah is trying to run his own [charitable] institutions to make money.

As suggested by both Zaher and Karim, Sayyid Fadlallah had, by that point, parted ways with Hizbullah, whose material support and spiritual guidance come from Iran. Shia Muslims in Lebanon who follow Ayatollah Khamene'i are usually members of Hizbullah, whose Lebanese political leader is Hassan Nasrallah. In the IVF clinics, these Hizbullah men stood out; they were usually the only ones to sport beards (a sign of piety), and, out of religious concern, they refused to shake the female anthropologist's hand, sometimes also asking for a male research assistant to be present at the interview.<sup>57</sup> These men's wives were invariably veiled, sometimes wearing full black chadors. In fact, Lebanese IVF clinic waiting areas sometimes looked like "little Iran," with rows of women dressed in black, men with religious beards, and occasionally men wearing clerical robes and turbans. Furthermore, of all the men in the study, these Hizbullah men were among the few to openly advocate for gamete and embryo donation, because Ayatollah Khamene'i had allowed it for his followers. The story of Bassam, a Hizbullah sympathizer from the Shia stronghold of Baalbek, Lebanon, demonstrates the ways in which Ayatollah Khamene'i's decision to allow donor technologies has resonated for Shia Muslims in Lebanon.

#### BASSAM AND HANNA'S EGG DONATION

On a busy day at a Shia-serving IVF clinic in Beirut, I met Bassam and Hanna, a young couple from Baalbek, which had been a Hizbullah stronghold during the Lebanese civil war. There, Bassam worked as a police officer, although he was studying at night to become a lawyer. Married to his first cousin Hanna, Bassam had assumed the responsibility for their infertility, undergoing repeated sperm tests showing "borderline" results. Highly intelligent and self-taught in English, Bassam attributed his sperm problems to his psychological depression, about which he spoke freely. "I think that there is a main reason for the quantity and quality problems," he said. "It's mainly the quantity of sperm. And it is depression—it affects the number of sperm. I think this is the main reason." When I asked him about the source of his depression, he continued, "It's most kinds of depression—economic, my living situation, in general. It's stress. [The doctor] told me my [variable] sperm counts depend on my mood. And I think my bad mood is permanent!" Laughing, he continued, "After 1996 exactly, the eco-

conomic situation [in Lebanon] has gotten bad, and also I have a problem in my family. My mother and father got divorced; they split in 1991, but the real divorce was in 1994. And because I'm the only man, the only son, I'm taking care of my mother and my sisters. I have three sisters, and my father doesn't support them. And now he's asking me to support him!"

In addition to these life stresses, Bassam and Hanna had undergone a reproductive rollercoaster. Early in their marriage, Hanna experienced two ectopic pregnancies, the second one of which almost killed her and required an emergency surgery. Since then, Hanna has suffered from tubal infertility and requires IVF in order to become pregnant. Their first cycle of IVF was covered by insurance from the Lebanese Order of Police, but was unsuccessful. In order to finance their second IVF cycle, Bassam took a loan against his future retirement benefits. Because the loan amount was not enough to cover the entire operation and medications, Hanna was in the process of selling her bridal gold at the time I met them.

Fortunately, Hanna produced many eggs during her second IVF attempt, and Bassam was clearly delighted when his sperm count was normal on the day of fertilization. When I saw Bassam and Hanna at the clinic on the day of embryo transfer, they were beaming. A broadly smiling Bassam had his arm around his small, plain wife, who was dressed in a black veil and a pretty blue-flowered jacket. They had been asked to donate their extra eggs to other infertile couples in the clinic, and Bassam explained his and Hanna's decision to donate in this way,

BASSAM: Of course, I asked the *shaykh* first.

ANTHROPOLOGIST: Which *shaykh*?

BASSAM: Sayyid Ali Khamene'i.

ANTHROPOLOGIST: Directly?

BASSAM: I asked at the office. They have an office in Beirut. And they said, "No problem" if you and your wife are agreeing to it. Then there are no other religious problems.

ANTHROPOLOGIST: So you follow Shaykh Khamene'i?

BASSAM: I follow Khamene'i' more than Fadlallah. Actually, we follow Sayyid al-Khu'i, but he's dead. So, in the new things—and we always have new things—we have to go to Sayyid Ali [Khamene'i] for scientific things.

ANTHROPOLOGIST: And I heard that he allows egg donation.

BASSAM: Yes, and so the day before yesterday, my wife was surprised by one of the doctors here. He met her and he told her she has thirty ovules [eggs]! And they asked us if we would give some to people who need them. I said, "No problem."

Hanna's eggs were divided into two groups. Nineteen were kept for Hanna and Bassam's own use, and eleven were donated to other couples.

Unfortunately, only seven of Hanna's nineteen eggs fertilized; five were implanted as embryos in her uterus, and two embryos were frozen for future use. When Hanna left to begin preparations for the embryo transfer, Bassam told me about his feelings for his wife, whom he clearly loved and admired,

You know, here, most people don't have this kind of information about infertility. Especially in the older generation, when a man and woman get married and there are no children for five years, they always blame the woman, and they tell him to go get married to another. But my mother, she *never* asked or said one word. She said, "Live your life. As long as you are happy with your wife, and everything is good, don't worry yourself about this." And so I take her advice about this. I don't get stressed. And my wife, she is a real good one—a very strong person. She is a believer, and she has hope. She is optimistic, not pessimistic. She is optimistic that she will have children, and I think this attitude will help us to succeed.

Unfortunately, none of Bassam and Hanna's five embryos implanted. Furthermore, all of the eggs that Hanna had donated to other Shia Muslim couples did not lead to pregnancies. According to the clinic's embryologist, Hanna's eggs were of "poor quality," making the likelihood of an IVF or ICSI pregnancy slim for this couple. But, as religious Shia supporters of Ayatollah Khamene'i, they have another option: namely, to receive another woman's donor eggs in the future.

#### SHIA DONATION AS MARRIAGE SAVIOR

As seen in Bassam and Hanna's case, some Shia couples are donating and receiving eggs and embryos with little reluctance, although sperm donation is a different matter, as we will see in the next chapter. For infertile Shia couples who accept the idea of third-party donation, they agree with Ayatollah Khamene'i's justification: namely, donor technologies are a "marriage savior," helping to avoid the "marital and psychological disputes" that may arise if the couple's case is otherwise untreatable. Such disputes are clearly dramatized in a popular Iranian movie called *Laila*, which documents the painful separation of an otherwise happily married but infertile couple, and which was released in the mid-1990s before the Khamene'i *fatwa* permitted such marriages to be saved through the use of donor technologies.

In Iran today, donor egg and donor embryo programs have been set up in most IVF clinics.<sup>58</sup> Donor eggs come from three sources: other IVF patients; relatives, and especially egg-donor sisters (even though Islam is

explicitly against the marriage of one man to two living sisters); and unmarried women who agree to participate as egg donors, with or without short-term *mut'a* marriages for a fee. Such marriages require only a witness and are not officially registered; thus, they take place in confidence in the back rooms of IVF clinics. Donors who wish to remain anonymous enter these *mut'a* marriages only by written agreement, without ever meeting the female recipients of their eggs or their temporary husbands. They receive their money following egg harvesting (usually around U.S. \$550), provide no personal information about themselves to the recipient couple, receive no information about the recipient couple, and generally "go about their business." In short, egg donation—as well as embryo donation from other couples—is largely a financial transaction in Iran, with very little regulation or control over who donates or how donation is enacted. The same is not true for the receiving of embryos. The 2003 law in Iran specifies clearly that couples requiring an embryo as a result of infertility must apply in writing to a *shari'a* court in order to receive permission for embryo transfer. The law specifies that the couple must be morally sound and suitable as parents and must be Iranian citizens.<sup>59</sup>

In Lebanon where I have conducted my own research, there is no such national law governing any aspect of assisted reproduction or third-party donation, nor is there any government "watchdog" body, as in Iran.<sup>60</sup> Instead, most Lebanese IVF clinics provide donor technologies under the protective cover of Ayatollah Khamene'i's *fatwa*, which they either post on clinic walls or keep shelved in clinic libraries for useful reference. For example, anthropologist Morgan Clarke, who also conducted fieldwork in Lebanon in 2003, noted, "Doctors keep Khamene'i's *fatwa* collection on the shelves of their surgeries to demonstrate the permissibility of such procedures to skeptical Muslim patients; and many such patients have profited from it to undertake donor sperm and egg procedures, even surrogacy arrangements, with a clear conscience."<sup>61</sup>

As in Iran, some Lebanese donors are other IVF patients such as Hanna; these Lebanese donors are mostly Shia Muslims who accept the idea of donation because they follow Ayatollah Khamene'i in Iran. Some Lebanese donors are friends or relatives of infertile women, including egg-donor sisters, who accompany infertile couples to IVF clinics as "designated donors." However, as we will see in chapter 8, at least a few clinics have developed true egg-donor programs, where fertile women anonymously donate their oocytes for a fee. As in Iran, *mut'a* marriages occasionally occur through written consent forms, but the donors otherwise remain anonymous to the recipient couple. In at least one Lebanese IVF clinic in which I worked, some of these anonymous donors were young non-Muslim, American women, who traveled to Lebanon to donate their eggs for \$1,000 of additional payment. The Lebanese couples most likely to receive these "Ameri-

failure will be behind him and he will instead become a father through human reproductive cloning. Although cloning has yet to be approved by Islamic authorities—and has been officially banned by both *fatwas* and bioethical declarations in the Sunni Muslim countries—Lebanon's local Shia cleric, Sayyid Fadlallah, has seen the potential use of human cloning for overcoming infertility in severely infertile men such as Ibrahim. Thus, he has ruled in its favor as a future assisted reproductive technology.

At the beginning of the new millennium, it is important to examine the role of these senior Muslim clerics as "agents of change." Indeed, their own "emergent Islamic masculinities" should be emphasized. Such male religious leaders have often encouraged the acceptance of new reproductive (as well as other life-saving medical) technologies, frequently justifying their decisions based on family welfare.<sup>63</sup> In Egypt, for example, the Al Azhar clergy has issued scores of *fatwas* on reproductive and other medically related issues, including, for example, the support of family planning.<sup>64</sup> In Iran, clerics have paved the way toward an award-winning population program, in which even the controversial practice of permanent sterilization through vasectomy is being recast as "Islamic" and the way to create a healthy, high-quality family.<sup>65</sup>

However, as this chapter has also shown, Islamic clerics are not of one mind in their stances on technoscience. Differences in Islamic attitudes toward assisted reproduction have clearly emerged along sectarian lines. In the Sunni Muslim world, the prohibition on donor gametes has led to an entrenchment of deeply held religious beliefs about the importance of marriage, which no third party should tear asunder. The Sunni proscriptions against third-party donation represent, in some sense, the materialization of conjugal connectivity and the literal embodiment of emotion, in that love of one's partner—including his or her gametes—must prevail over the desire to have children "by any means." In this light, donor technologies represent a betrayal of sorts, a confession that having children is more important than loving one's infertile spouse. For this reason, donor gametes continue to be shunned in the Sunni Muslim world, with donation itself equated to *zina*, or adultery. In short, in the Sunni Muslim countries—which are, by far, the most populous—the use of assisted reproductive technologies has served to reinforce notions of conjugal connectivity, as well as biological kinship, parenthood, and family life. This will become abundantly clear in the following chapter, which examines Muslim men's aversion to "social fatherhood" through either sperm donation or adoption.

Yet, the globalization of these technologies to other parts of the Shia Muslim world has fundamentally altered understandings of the ways in which families *can* be made and the ways in which marriages *can* be saved through the uses of assisted reproductive technologies. In short, the arrival

of donor technologies in the Muslim Middle East has led to a brave new world of reproductive possibility never imagined when these technologies were first introduced there more than twenty-five years ago. These technologies have engendered significant medical transnationalism and reproductive tourism; mixing of gametes across ethnic, national, and religious lines; the birth of thousands of egg- and embryo-donor babies to devout infertile Muslim couples; gestational surrogacy arrangements; and in some cases, infertile men's acceptance of donor sperm. Because of the availability of all of these options in Iran and Lebanon, infertile Muslim couples have begun to reconsider traditional notions of biological kinship, even if "social parenthood" of a donor child is still not widely embraced. Moreover, the availability of these forms of third-party reproductive assistance has weakened the Sunni Muslim ban on third-party donation across the region, with some infertile Sunni Muslim couples reconsidering their own anti-donation moral stances. As a result, Shia gametes are finding their ways into Sunni bodies, despite current regional antagonisms between these two branches of Islam.<sup>66</sup>

In my view, these multiple Islamic perspectives on assisted reproductive technologies are powerful indicators of the profound social effects that biotechnology may engender. As the assisted reproductive technologies become further entrenched in the Muslim world, and additional forms of reproductive and repro-genetic technology become available, it will be increasingly important to examine the new local moral worlds that are likely to arise in response to technological globalization. Scholars of Islam must follow these global technologies into the future, anticipating the ways in which PGD, uterine transplantation, human cloning, therapeutic human embryonic stem cells, and the like will make their way into the diverse moral and social imaginaries of numerous Muslim societies around the globe. For, as long as the problem of infertility continues unabated in the Muslim world, the globalization of new assisted reproductive technologies will continue—reaching places such as Egypt, Lebanon, Iran, and beyond.

can eggs" were often Shia Muslims, who accepted the idea of donation because they followed the teachings of Ayatollah Khamene'i in Iran.

In general, in the IVF clinics in Lebanon where I did my research, there were long waiting lists for donor eggs among childless Shia Muslim couples. These waiting lists grew even longer in mid-2003 as a result of a new decision by the local cleric, Sayyid Fadlallah. Through the practice of *ijtihad*, Sayyid Fadlallah eventually decided that the practice of egg donation was morally licit, as long as strict requirements were followed. To wit, the donation should not be anonymous and should be accompanied by a written marriage contract before witnesses. Anonymous *mut'a* marriages behind closed doors were not sufficient, according to Sayyid Fadlallah, because they defied the true spirit of marriage, which is required to make egg donation legal within the Islamic parameters of polygyny.

With Sayyid Fadlallah's April 2003 permission of polygynous egg donation, the door to donation in Lebanon swung open even further. Large numbers of Fadlallah-following Shia Muslim couples began inquiring about egg donation during the time of my study. Shia men, who might otherwise have been pressured by society to divorce their infertile wives, began to reassess their marital options in light of this new *fatwa* from Sayyid Fadallah. In short, choosing egg donation "out of love" for an infertile wife emerged as a new possibility for *all* Shia men in Lebanon by mid-2003. Egg donation—including with American donors—was conceived of as a way for infertile wives to experience the joys of pregnancy and motherhood, while still using their husband's sperm. The permission of egg donation by *both* Ayatollah Khamene'i and Sayyid Fadlallah was a great boon to marital relations, especially for "reproductively elderly" wives and husbands, who were signing up at Lebanese IVF clinics to access the eggs of younger, more fertile donor women.

It is perhaps ironic to consider that the official interpreters of Islam—largely older Shia Muslim male clerics—are leading the faithful in these maritally salubrious directions. In the high-tech world of assisted reproduction, male clerics, particularly in Iran, are using *ijtihad*, or religious reasoning, to interpret and make sense of new technologies that could never have been imagined before the new millennium.<sup>62</sup> The frankly "adventurous" attitude toward third-party gamete donation on the part of otherwise "conservative" Ayatollah Khamene'i has led Shia Muslims to embrace donation as a "marriage savior." Ayatollah Khamene'i's moral justification for allowing donor technologies was included in the text of his *fatwa*: namely, preserving the marriage of the infertile couple by preventing the "marital and psychological disputes" that would inevitably arise from remaining childless indefinitely. In short, preservation of marriage mattered as much to Ayatollah Khamene'i as preservation of lineage—an opinion at odds with the majority Sunni thinking on the subject.

That American donor eggs are being used to save Hizbullah marriages is just one of the outcomes of this brave new world of reproductive "assistance" that could never have been imagined when these technologies were first introduced to Lebanon in the mid-1990s. Furthermore, in multisectarian Lebanon, the recipients of these donor eggs are not necessarily only Shia Muslim couples. Some Sunni Muslim patients from Lebanon and from other Sunni Muslim countries such as Egypt and Syria are quietly crossing international borders to "save their marriages" through the use of donor gametes, thereby secretly going against the dictates of Sunni Muslim orthodoxy. Lebanon and Iran are now the two regional hubs of reproductive tourism. Just as Syrians and Palestinians head to Lebanon, scores of Sunni Muslim Arabs from the Gulf States, such as Saudi Arabia and Kuwait, are traveling to Tehran in pursuit of donor gametes. Their presence in large numbers has necessitated the services of medical translators, who can negotiate clinical encounters in both Arabic and Farsi.

## CONCLUSION

It is fair to state that the Muslim world—generally positioned on the receiving end of global reproductive technology transfers—has nonetheless embraced assisted reproductive technologies with considerable enthusiasm while, at the same time, reconfiguring them in accordance with the local religious moralities so important in this region. Islam is interpreted, debated, and practiced locally. As such, local forms of the religion must be examined and analyzed. This chapter is case in point: Islamic approaches to gamete donation in Egypt are, in fact, very different from Islamic approaches to gamete donation in Iran.

What it means to be a "good" Muslim—and a good Muslim man—takes particular local forms, based on locally grounded and morally imbued interpretations of the Islamic tradition. As we have seen in this chapter—and as we will witness in even greater depth in chapters 7 and 8—Muslim men are doing their best to follow the local religious discourse on assisted reproduction in order to practice these technologies accordingly. Their "Islamic masculinities" are "emergent masculinities." Not only are the technologies themselves rapidly evolving, but so is the Islamic discourse and decision making on issues such as gamete donation. Islamic masculinity thus entails "keeping up with the times," both technologically and religiously. Emergent masculinities in the Muslim Middle East could thus be described as *technoscientifically and morally agentive*: Namely, new scientific technologies and possibilities are being ardently embraced by pious Muslim men such as Ibrahim, whose sad story of ICSI failure opened this chapter. In Ibrahim's case, he dreams of a day when all his reproductive