

Provided for non-commercial research and education use.  
Not for reproduction, distribution or commercial use.



This article appeared in a journal published by Elsevier. The attached copy is furnished to the author for internal non-commercial research and education use, including for instruction at the authors institution and sharing with colleagues.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



www.sciencedirect.com  
www.rbmonline.com



## ARTICLE

# Third-party reproductive assistance around the Mediterranean: comparing Sunni Egypt, Catholic Italy and multisectarian Lebanon


Marcia C Inhorn <sup>a,\*</sup>, Pasquale Patrizio <sup>a</sup>, Gamal I Serour <sup>b</sup>

<sup>a</sup> Anthropology Department, Yale University, 10 Sachem Street, New Haven, CT 06511, United States; <sup>b</sup> International Islamic Center for Population Studies and Research, Al-Azhar University, Cairo, Egypt

\* Corresponding author. E-mail address: [marcia.inhorn@yale.edu](mailto:marcia.inhorn@yale.edu) (MC Inhorn).



Marcia C Inhorn, PhD, MPH, is the William K Lanman Jr. Professor of Anthropology and International Affairs in the Department of Anthropology and The Whitney and Betty MacMillan Center for International and Area Studies at Yale University. She also serves as Chair of the Council on Middle East Studies. She is the first Diane Middlebrook and Carl Djerassi Visiting Professor at the Centre for Gender Studies at the University of Cambridge, commencing autumn 2010. A specialist on Middle Eastern gender and health issues, Inhorn has conducted research on infertility and assisted reproduction treatment in Egypt, Lebanon, the United Arab Emirates and Arab America.

**Abstract** The article examines religious and legal restrictions on third-party reproductive assistance in three Mediterranean countries: Sunni Egypt, Catholic Italy and multisectarian Lebanon. In Egypt, assisted reproduction treatments are permitted, but third parties are banned, as in the rest of the Sunni Islamic world. Italy became similar to Egypt with a 2004 law ending third-party reproductive assistance. In multisectarian Lebanon, however, the Sunni/Catholic ban on third-party reproductive assistance has been lifted, because of Shia rulings emanating from Iran. Today, third-party reproductive assistance is provided in Lebanon to both Muslims and Christians, unlike in neighbouring Egypt and Italy. Such comparisons point to the need for understanding the complex interactions between law, religion, local moralities and reproductive practices for global bioethics. 

© 2010, Reproductive Healthcare Ltd. Published by Elsevier Ltd. All rights reserved.

**KEYWORDS:** assisted reproduction, Catholicism, Islam, law, Mediterranean, third-party reproductive assistance

## Introduction

Over the past three decades, assisted reproduction treatment has spread around the globe, including countries where local religious moralities have played a major role in accommodating some practices of assisted conception, while rejecting others. One major area of rejection has been third-party reproductive assistance. In many countries

where assisted reproduction treatment is legally practised, third-party reproduction with gamete donors and surrogates is legally or religiously restricted.

This article attempts to examine attitudes toward third-party reproductive assistance around the Mediterranean. Comparisons of this kind are quite useful, but are relatively infrequent in the scholarly literature on assisted reproduction treatment (Blyth and Landau, 2004, 2009).

Rarely are Muslim countries included in contemporary comparisons (Birenbaum-Carmeli and Inhorn, 2009). Yet, comparisons can help to: (i) demonstrate the timeline of treatment invention, establishment and diffusion, and the astounding rapidity with which treatments have globalized (Inhorn, 2003); (ii) delineate the similarities in clinical practice around the world, thereby demonstrating the scientific 'literacy' and 'modernity' of physicians and patients living in nations on the receiving end of transfers (Inhorn, 2003); and (iii) indicate the ways in which societies differ in their practice of assisted reproduction treatment, differences that are most often based on social, cultural, legal, religious and bioethical norms (Birenbaum-Carmeli and Inhorn, 2009). Such diversity is strikingly apparent within the 27 member states of the European Union (Jones and Cohen, 2007). Whereas progressive Scandinavian countries such as Norway and Sweden have enacted restrictive legislation against both third-party donation and surrogacy, traditional Catholic Spain (with its large and growing Muslim Andalusian population) is now the European epicentre of so-called 'reproductive tourism', because of its liberal policies allowing all manner of third-party donation (Matorras, 2005).

This article assesses some of the convergences, divergences and moral nuances occurring in three seemingly disparate Mediterranean nations (Egypt, Italy and Lebanon) regarding third-party reproductive assistance. Why the Mediterranean, and why these three countries in particular? First, the Mediterranean region is the birthplace of the three major monotheistic traditions, Judaism, Christianity and Islam (in chronological order). Italy is home to Rome and the Vatican, the birthplace of Catholicism. Al-Azhar University, which is the world's oldest and most important religious university in the Sunni Islamic world, was built in the centre of Cairo, Egypt, where it remains today. Lebanon, where much blood has been shed over religion, nonetheless is the most religiously diverse society in the Mediterranean region and in the Middle East more generally. As the meeting place of all three monotheistic religions, Lebanon currently hosts 18 recognized religious sects, including Sunni, Shia, Druze, Catholic Maronites, Roman Catholics, Greek Orthodox, various Protestant sects and even a remaining Lebanese Jewish population (Inhorn, 2004).

Second, the relative geographic proximity of these Mediterranean countries has led to a 'reproscape' of circulating peoples, technologies, body parts, media, finance and ideas (Inhorn, *in press*). A Mediterranean reproscape clearly exists, for example: (i) Moroccan and Tunisian physicians send patients to southern France; (ii) European pharmaceutical companies sell fertility medications to Egypt; (iii) Syrian IVF patients cross the checkpoint into Lebanon in order obtain treatments forbidden in Syria; and (iv) Turks and Israelis head to Cyprus for their donor gametes (Gurtin-Broadbent, *in press*; Inhorn, 2010). Such Mediterranean circulations – across borders and across the sea – have existed for centuries (e.g., Moorish Spain), but are particularly prevalent in today's assisted reproduction treatment reproscape.

Finally, the Mediterranean, as a region, boasts some of the most stringent anti-donation sentiment in the world. Namely, the Vatican holds the position that life begins at conception and bans reproductive technologies of all kinds (including contraception, abortion, IVF, third-party gamete

donation and surrogacy) (Blyth and Landau, 2009; Traina et al., 2008). The Sunni Islamic establishment allows treatment but bans third parties altogether (including egg donors, sperm donors, embryo donors, ooplasm donors and surrogates) (Inhorn, 2003; Meirou and Schenker, 1997; Moosa, 2003; Serour, 1996, 2008; Serour and Dickens, 2001). This article briefly examines these bans in Egypt and Italy – in theory and in practice – and suggests how Italy has become more like Egypt in recent years.

This article also reports on the lesser-known case of Lebanon, a multisectarian, Muslim–Christian Mediterranean country, which has been forced to grapple with the complexities of these bans. Although the Lebanese population is predominantly Muslim, the assisted reproduction physician community is largely Christian Catholic. Furthermore, the Shia minority comprises the Muslim majority in Lebanon; some Shia follow religious leaders in Iran (Clarke, 2009). Thus, the religious and legal landscape of Lebanon is extremely complex, particularly with regard to third-party reproductive assistance.

## Materials and methods

This article is based on qualitative (ethnographic) interviews with IVF physicians, patients and clerics carried out in Egypt (1996, 2007) and Lebanon (2003–2005, 2009), as well as interviews with Italian physicians and patients coming for treatment to the USA (2008–9). All interviews were conducted with written informed consent and the research was approved by the Human Subjects Committee, Yale University (IRB protocol 0809004256). The interviews were ethnographic, involving detailed, semi-structured reproductive histories as well as open-ended questions involving patients' attitudes and practices. All interviews were administered to research subjects by the first author, a medical anthropologist with long-term research experience in the Middle East (1985–present). Interviews were conducted in either English or Arabic and lasted 0.5–3 h, depending upon research subjects' preferences. Sixty-six infertile couples were recruited from two major hospital-based treatment clinics in Cairo, Egypt (Inhorn, 2003); 220 infertile couples from two major treatment clinics, one university hospital-based and one private, in Beirut, Lebanon (Inhorn, 2004); and 15 infertile couples from a university-based treatment clinic in New Haven, CT, USA. Several of the latter patients were Catholic reproductive tourists from Italy. Most of the couples in Egypt and Lebanon were Muslim (all Sunni in Egypt, but a mixture of Sunni, Shia and Druze in Lebanon). A substantial minority in both countries was Christian (Coptic Orthodox in Egypt and Maronite Catholic, Roman Catholic, Greek Orthodox and Armenian Orthodox in Lebanon).

In addition, more than 20 interviews were carried out by the first author with clinic staff (physicians, nurses, embryologists) in the three sites and included questions about how legal and religious rulings affected clinical practice. Finally, all three authors undertook detailed examination of available laws and religious rulings, in this case, *fatwas* in Egypt and Lebanon and recent legislation (Law 40/2004 and its 2009 Supreme Court amendment) in Italy. The authors have followed the religious, ethical and legal discussions in all three countries until the present time.

## Results

### Sunni Egypt

In 1980, only 2 years after Louise Brown's birth in Britain, the Grand Shaykh of Egypt's centuries-old religious university, Al-Azhar, issued the first *fatwa* on medically assisted reproduction. This *fatwa* permitted treatment for Muslims, but disallowed any form of third-party reproductive assistance, including surrogacy. By 1986, the first treatment centre had opened in Egypt, with the first Egyptian assisted reproduction treatment baby born in 1987. By the year 2003, the Egyptian industry had truly blossomed, with approximately 50 clinics, five of them at least partially state subsidized. However, none of these clinics offered third-party reproductive assistance to Egyptian patients (Inhorn, 2003).

This ban on third-party assistance has been upheld in many *fatwas* and bioethical decrees issued since 1980 in the Sunni Muslim countries. For example, *fatwas* supporting assisted reproduction treatment but banning third-party assistance have been issued in Kuwait, Qatar, Saudi Arabia and the United Arab Emirates (Meirow and Schenker, 1997; Serour, 1996, 2008; Serour and Dickens, 2001). In 1997, 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, a landmark five-point bioethical declaration included recommendations to prevent human cloning and to prohibit all situations in which a third party invades a marital relationship through donation of reproductive material (Moosa, 2003). Such a ban on third-party reproductive assistance of all kinds is now effectively in place in the Sunni world, which represents approximately 80–90% of the world's 1.6 billion Muslims.

Furthermore and quite importantly, among Sunni Muslim IVF physicians and patients interviewed in Egypt, this ban on third-party reproductive assistance is vociferously upheld for three major reasons: (i) the moral implications of third-party donation for marriage, specifically the comparison to *zina*, or adultery; (ii) the potential for incest among the half-siblings of anonymous donors; and (iii) the destruction of *nasab*, or genealogical lineage to known parents (especially patrilineal fathers), with its devastating implications for kinship, inheritance, family life and the psychological state of the donor child (Inhorn, 2003).

### Catholic Italy

The first clinic in Italy was established by Prof. E Cittadini in Palermo, Sicily, in 1982, and the first Italian assisted reproduction treatment birth occurred in 1984 (Benagiano and Gianaroli, 2004; Bonaccorso, 2008). By the late 1980s, Italy had developed one of the most cutting-edge industries in the world, earning Italy the moniker of 'the wild west' of assisted reproduction in Europe (Buxton, 2009). Indeed, Italian developments in egg freezing, egg donation and genetic testing of embryos heralded the beginning of an industry intended for career women who had delayed conception into their 40s and beyond.

However, on December 11, 2003, the Italian senate passed a bill introducing tight restrictions on assisted repro-

duction, which were subsequently signed into law by the President of the Republic of Italy on February 19, 2004. This restrictive legislation emerged after 10 years of heated parliamentary debate. The resulting Medically Assisted Reproduction Law, known in Italy as Law 40/2004, was championed by the Vatican and conservative politicians in the Italian parliament. The major features of the restrictive legislation included: (i) the use of treatments only among 'stable heterosexual couples who live together and are of childbearing age' and are 'clinically infertile'; (ii) the prohibition of embryo cryopreservation; (iii) the prohibition of third-party gamete donation (eggs, spermatozoa, embryos) and surrogacy; (iv) the prohibition of embryo research; (v) the prohibition of treatment for single women or same-sex couples; (vi) the fertilization of no more than three oocytes (i.e., eggs) at any one time; (vii) the simultaneous transfer to the uterus of all fertilized eggs; and (viii) the prohibition of preimplantation genetic diagnosis and prenatal screening for genetic disorders among human embryos (Benagiano and Gianaroli, 2004; La Sala et al., 2004).

Interestingly with regard to third-party reproductive assistance, proponents of the new Italian law used similar moral justifications to those found in Sunni Egypt, namely: (i) the risk of future incestuous relationships among the children of anonymous donors; (ii) damage to the personal identity of the child, because of lack of knowledge about biological origins; (iii) parental rejection of the donor child, especially among infertile men who cannot claim biological paternity; and (iv) the risk of positive eugenics – i.e., creating a child with sought-after characteristics of a donor (e.g., blue eyes, blonde hair, IQ > 130).

Law 40/2004 was clearly inspired and supported by the Catholic Church, which objects to assisted reproduction treatment in general as disassociating procreation from sex and to third-party reproductive assistance in particular for introducing an 'emotional and spiritual wedge between husband and wife both symbolized by and enacted in sexual infidelity' (Traina et al., 2008). This association of marital infidelity with third-party donation is similar to the moral concern with *zina* raised by Egyptian clerics and other Sunni Muslim patients in this study.

Anti-clerical opponents of Law 40/2004 have charged that the moral principles of the Catholic Church have been transformed into unprecedented legal norms. For example, within the first year of the new law, the Italian reproductive science community and left-wing politicians mobilized to oppose the legislation. Italy's Radical Party, known for its anti-Catholic positions, collected the 500,000 necessary signatures to call for a referendum vote on Law 40/2004. However, in a Vatican-approved strategy, the country's Catholic bishops called upon their parishioners to boycott the vote. The oppositional referendum ended with half the required vote, leaving the restrictions firmly in place.

In April 2009, the Italian Supreme Court issued an amendment to Law 40/2004, stating that some aspects of the law were unconstitutional (Ubaldi, 2010). The restrictions on embryo cryopreservation and the number of embryos to be transferred were lifted. However, at the time of writing, the law banning third-party reproductive assistance in Italy continues. Italian physicians are restricted to performing treatment with a married couple's gametes and without any form of egg donation, sperm donation, embryo donation



or surrogacy. Italy thus provides an example of the convergence of state religion and state law, largely against the wishes of the mostly Catholic physicians and infertile Catholic patients who seek treatment, according to the findings of this study. This disharmony between a religiously inspired national law and the wishes of the people is, in the end, quite different from the case of Egypt, where no national law exists, but where both Muslim practitioners and patients wish to follow the anti-donation *fatwa* rulings of the religious establishment.

### Multisectarian Lebanon

But what about Lebanon, a religiously mixed community, with significant populations of Catholics, Sunni Muslims, Shia Muslims and other minority Muslim and Christian religious sects? Given the multisectarian nature of Lebanese society, it is important to try to understand how the local assisted reproduction industry has developed there and to which religious authorities it has turned for guidance surrounding treatment and particularly third-party assistance.

First, it is important to note that, compared to Egypt and Italy, Lebanon is a relative latecomer to assisted reproduction treatment. The first clinics did not open in Beirut until the mid-1990s, nearly a decade later than in Egypt and nearly 15 years after Italy's assisted reproduction treatment sector began in earnest. This relative delay has everything to do with the 15-year civil war: it was not until the early 1990s, after the fighting stopped, that Lebanon was able to begin rebuilding its medical infrastructure, which had been severely damaged during the period of prolonged battle, including its urban centres. By the year 2000, however, the country boasted approximately 15 assisted reproduction clinics, all of them abiding by the Middle Eastern regional ban on third-party assistance.

The year 2000, however, was a watershed in Lebanon. At a Middle East Fertility Society (MEFS) meeting held in Beirut in late 1999, the audience of Middle Eastern practitioners was stunned when a group of Iranian female physicians, dressed in black chadors, described in great scientific detail the clinical outcomes of their egg donor programme. When questioned by the incredulous audience, these Iranian physicians explained that the Supreme Leader of the Islamic Republic of Iran, Ayatollah al-Khamene'i, the hand-picked successor to Iran's Ayatollah Khomeini, had in 1999 issued a *fatwa* effectively permitting both egg and sperm donor technologies to be used (Clarke, 2009; Inhorn, 2006a). Interestingly, the moral justification for allowing donor technologies was included in the text of Ayatollah al-Khamene'i's *fatwa*: namely, preserving the marriage of the infertile couple through the birth of donor children in order to prevent the 'marital and psychological disputes' that would inevitably arise from remaining childless indefinitely. In short, preservation of marriage was prioritized by Ayatollah al-Khamene'i over preservation of lineage – an opinion at odds with the majority Sunni thinking on the subject (Inhorn, 2003).

This millennial moment in Iran had an almost immediate impact in Lebanon. Conservative Shia Muslims, including members of Lebanon's Hizbullah party, were the first to press for third-party donation, because they followed the spiritual guidance of Ayatollah Khamene'i (Clarke, 2009).

Shia assisted reproduction physicians began to respond to these requests, developing 'informal' egg and sperm donation arrangements within their clinics. In short, the door to donation was opened in Lebanon in 2000 as a direct result of the Iranian lifting of the third-party ban in 1999. Starting with entrepreneurial Shia IVF physicians who cited the new Iranian guidelines, the local Lebanese Shia clergy soon followed, issuing formal *fatwas* or informal opinions to their followers about the permissibility of third-party reproductive assistance, especially egg donation, which most agreed was now *halal*, or religiously permitted (Clarke, 2009; Inhorn, 2006a,b).

In addition, Christian IVF practitioners soon joined the pro-donation bandwagon in Lebanon, setting up informal programmes in their clinics. Many Western-leaning Lebanese Christian IVF practitioners had been frustrated by the earlier Sunni-inspired ban on third-party assistance; they were relieved that it had finally been lifted. Furthermore, many Lebanese Catholic Maronites, both physicians and patients, did not have any moral qualms about using donor technologies. In their interviews for this study, they stated that donation should be seen as an act of altruism, similar to child adoption, which most of them condoned on Christian religious grounds (with the exception of Shia Iran and secular Turkey, most Sunni Muslim countries do not condone adoption) (Abbasi-Shavazi et al., 2008; Inhorn, 2006a,b).

The lifting of the third-party donation ban in Lebanon has certainly had its detractors, including physicians, patients and religious authorities. According to the findings of this study, the vast majority of Sunni Lebanese patients do not accept third-party assistance under any circumstances and there are many Shia Muslim patients who do not as well. For those who do contemplate third-party donation – mostly Christians and some Shia Muslims (especially followers of Hizbullah) – donor technologies are widely regarded as a 'last resort,' a kind of 'necessary evil' or 'act of desperation' when all else fails.

Furthermore, not all assisted reproduction physicians agree with the lifting of the donor ban in Lebanon. One politically powerful Shia physician has attempted repeatedly to introduce legislation banning all forms of third-party assistance in Lebanon (Clarke, 2009). Despite significant support among Sunni political groups, the bill has never been passed, probably because of a combination of multisectarian resistance and post-war exhaustion and apathy.

Some clinicians interviewed for this study retain significant moral and medical ambivalence toward the way donation is being practised in Lebanon. First, there is no local treatment registry of any sort; thus, there are no reliable statistics on the numbers of treatment cycles with and without donation. Second, there is no reliable regulatory system in the country. As a result, third-party reproductive assistance is being carried out behind closed doors, in the unregulated, sometimes secretive, environment of private clinics (Inhorn, 2004). As a result of this lack of regulatory oversight, practices that would never occur in Euro-American settings do, in fact, take place in Lebanon. For example, fresh sperm samples are used in sperm donation, without any kind of mandatory screening for HIV virus, hepatitis virus and other sexually transmitted infections. Similarly, no mandatory genetic testing is performed with either donors or recipients. Hence, serious genetic diseases, such

as cystic fibrosis, may be perpetuated within the Lebanese population. Furthermore, forms of donation that have been ethically banned in the USA and parts of Europe have been practised in Lebanon. One such form is ooplasm donation, where the cytoplasm of a younger woman's oocytes is injected into an older woman's oocytes to improve their quality. Finally, there is grave potential for exploitation within the Lebanese industry. For example, poor refugees or maids from Africa, Southeast Asia or war-torn parts of the Middle East may be coerced into serving as egg donors and gestational surrogates because of the lure of payment. According to some Lebanese physicians – both Muslim and Christian – these types of practices should not be occurring in the country because they jeopardize the reproductive rights of women as well as maternal and child health.

## Discussion

In this 'anything goes' environment, Lebanon has now taken the former place of Italy as 'the wild west' of Mediterranean fertility treatment. Even Spain – the contemporary European hub of egg donation (Matorras, 2005; Mendez, 2010) – does not allow surrogacy, whereas Lebanon does. Furthermore, because Spanish egg donation is often done altruistically by Spanish women with or without monetary compensation (Mendez, 2010), some of the concerns raised in Lebanon about women's reproductive rights and the potential for exploitation have been largely avoided in Spain. And Israel, always at the cutting edge of treatment developments, nonetheless maintains a strict regulatory environment (Kahn, 2000), which is not found among its northern neighbour Lebanon. Because of travel bans between the two countries, Lebanon and Israel have little in the way of reproductive scientific or technological exchange.

At the time of writing, Lebanon and Iran are the only two Middle Eastern Muslim countries where third-party reproductive assistance is practised (Abbasi-Shavazi et al., 2008; Inhorn and Tremayne, in press; Larijani and Zahedi, 2007). All other Muslim countries, including Egypt, continue to ban third-party donation and surrogacy, based on a moral injunction that is, at the same time, both very strongly felt among most Sunni Muslims and also upheld in clinical practice among the Sunni Muslim countries. Italy, too, has become quite 'Sunni' in banning all manner of third-party reproductive assistance. Although Sunni clerics were certainly not the inspiration for Italy's third-party donation ban, it is noteworthy that similar moral justifications have been used by the Catholic clergy supporting Law 40/2004.

Finally, it is important to reiterate that, as of 1 April 2009, Italy's Supreme Court of Cassation has declared the ban on embryo cryopreservation unconstitutional, particularly the limit on the production of no more than three embryos and the required transfer of all the embryos into a woman's uterus (Ubaldi, 2010). Theoretically, embryo diagnostic techniques would also be possible, but many Italian physicians are still fearful of offering pre-implantation genetic diagnosis because of the absence of clear rulings and the political pressure to conform. Thus, Italy, once incredibly permissive, has become more restrictive than the many Muslim countries where assisted reproduction treatment is practised. Such an irony that defies global

East–West stereotypes was clearly unanticipated when IVF was born in Europe more than 30 years ago.

## Financial support

The research 'Globalization and Reproductive Tourism in the Arab World' was supported by the National Science Foundation (BCS-0549264) and the US Department of Education Fulbright-Hays Faculty Abroad Research Program (PI, MC Inhorn).

## References

- Abbasi-Shavazi, M.J., Inhorn, M.C., Razeghi-Nasrabad, H.B., Toloo, G., 2008. 'The Iranian ART revolution': infertility, assisted reproductive technology, and third-party donation in the Islamic Republic of Iran. *J. Middle East Wom. Stud.* 4, 1–28.
- Benagiano, G., Gianaroli, L., 2004. The new Italian IVF legislation. *Reprod. BioMed. Online* 9, 117–125.
- Birenbaum-Carmeli, D., Inhorn, M.C. (Eds.), 2009. *Assisting Reproduction, Testing Genes: Global Encounters with New Biotechnologies*. Berghahn, New York.
- Blyth, E., Landau, R. (Eds.), 2004. *Third Party Assisted Conception Across Cultures: Social, Legal and Ethical Perspectives*. Jessica Kingsley, London.
- Blyth, E., Landau, R. (Eds.), 2009. *Faith and Fertility: Attitudes Towards Reproductive Practices in Different Religions from Ancient to Modern Times*. Jessica Kingsley, London.
- Bonaccorso, M., 2008. *Conceiving Kinship: Assisted Conception, Procreation and Family in Southern Europe*. Berghahn, New York.
- Buxton, J., 2009. Restrictive fertility law forces Italian patients abroad. Available from: <<http://www.BioNews.org.uk>>.
- Clarke, M., 2009. *Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon*. Berghahn, New York.
- Gurtin-Broadbent, Z., in press. Assisted reproduction in secular Turkey: regulation, rhetoric, and the role of religion. In: Inhorn, M.C., Tremayne, S. (Eds.), *Islam and Assisted Reproductive Technologies*. Berghahn, New York.
- Inhorn, M.C., 2003. *Local Babies, Global Science: Gender, Religion, and In Vitro Fertilization in Egypt*. Routledge, New York.
- Inhorn, M.C., 2004. Privacy, privatization, and the politics of patronage: ethnographic challenges to penetrating the secret world of Middle Eastern, hospital-based in vitro fertilization. *Soc. Sci. Med.* 59, 2095–2108.
- Inhorn, M.C., 2006a. 'He won't be my son': Middle Eastern Muslim men's discourses of adoption and gamete donation. *Med. Anthropol. Q.* 20, 94–120.
- Inhorn, M.C., 2006b. Making Muslim babies: IVF and gamete donation in Sunni and Shi'a Islam. *Cult. Med. Psychiatry* 30, 427–450.
- Inhorn, M.C., 2010. 'Assisted' motherhood in global Dubai: reproductive tourists and their helpers. In: Chavkin, W., Maher, J. (Eds.), *The Globalization of Motherhood: Deconstructions and Reconstructions of Biology and Care*. Routledge, New York, pp. 180–202.
- Inhorn, M.C., in press. Globalization and gametes: reproductive tourism, Islamic bioethics, and Middle Eastern modernity. *Anthro. Med.* 18.
- Inhorn, M.C., Tremayne, S. (Eds.), in press. *Islam and Assisted Reproductive Technologies*. Berghahn, New York.
- Jones Jr., H.W., Cohen, J., 2007. IFFS surveillance 07. *Fertil. Steril.* 88, 1478–1479.
- Kahn, S.M., 2000. *Reproducing Jews: A Cultural Account of Assisted Conception in Israel*. Duke University Press, Durham, NC.

- La Sala, G.B., Nicoli, A., Capodanno, F., Rondini, I., Villani, M.T., Iannotti, F., 2004. The effect of the 2004 Italian law on outcomes of assisted reproduction technology in severe male factor infertility. *Reprod. BioMed. Online* 20, 2–10.
- Larijani, B., Zahedi, F., 2007. Ethical and religious aspects of gamete and embryo donation and legislation in Iran. *J. Relig. Health* 46, 399–408.
- Matorras, R., 2005. Reproductive exile versus reproductive tourism. *Hum. Reprod.* 20, 3571.
- Meirow, D., Schenker, J.G., 1997. The current status of sperm donation in assisted reproduction technology: ethical and legal considerations. *J. Assist. Reprod.* 14, 133–138.
- Mendez, V., 2010. Cross-border reproductive care: oocyte donation in Spain. Paper presented at the European Society for Reproduction and Embryology Annual Meeting, Rome, Italy, 27 June.
- Moosa, E., 2003. Human cloning in Muslim ethics. *Voices Across Boundaries* Fall, 23–26.
- Serour, G.I., 1996. Bioethics in reproductive health: a Muslim's perspective. *Middle East Fertil. Soc. J.* 1, 30–35.
- Serour, G.I., 2008. Islamic perspectives in human reproduction. *Reprod. BioMed. Online* 17 (Suppl. 3), 34–38.
- Serour, G.I., Dickens, B.M., 2001. Assisted reproduction developments in the Islamic world. *Br. J. Obstet. Gynecol.* 74, 187–193.
- Traina, C., Georges, E., Inhorn, M.C., Kahn, S.M., Ryan, M., 2008. Compatible contradictions: religion and the naturalization of assisted reproduction. In: Andrew, L., Brody, B., McKenny, G. (Eds.), *Altering Nature – Volume II: Religion, Biotechnology, and Public Policy*. Springer, New York, pp. 15–85.
- Ubaldi, F.M., 2010. How changes in Italian legislation have influenced medical practices? Paper presented at the European Society for Reproduction and Embryology Annual Meeting, Rome, Italy, 27 June.
- Declaration: The authors report no financial or commercial conflicts of interest.*
- Received 23 June 2010; refereed 4 August 2010; accepted 7 September 2010.