Globalization, Women, and Health in the Twenty-First Century

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In Perspective

Gender, Health, and Globalization in the Middle East: Male Infertility, ICSI, and Men's Resistance*

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Introduction

Since the 1978 birth in England of Louise Brown, the world's first test-tube baby, in vitro fertilization (IVF) has spread around the globe, reaching countries far from the technology-producing nations of the West. The same is true of intracytoplasmic sperm injection (ICSI), a variant of IVF designed in Belgium and first used successfully in 1992 to overcome intractable male infertility. The rapid globalization of both IVF and ICSI to the far reaches of the globe is abundantly apparent in the 22 nations of the Muslim Middle East, where a private assisted reproductive technology (ART) industry is flourishing. There, ART centers have opened in small, petro-rich Arab Gulf countries such as the United Arab Emirates and Qatar, as well as much larger but less prosperous North African nations, including Morocco and Egypt. As of 2003, Egypt boasted nearly 50 ART centers, outstripping its high-tech neighbor Israel, with its 24 ART centers. Interestingly, the tiny neighboring country of Lebanon has nearly 15 ART clinics for a population of less than 5 million, constituting one of the highest per capita concentrations of ART centers in the world. In most of these ART centers, both IVF and ICSI are now performed. As I argue in this chapter, the newer reproductive technology, ICSI, has led to both local resistances and social transformations, which are the very result of its globalization into this region of the Muslim world.

The Local in the Global

As with all forms of global technology transfer, ARTs are not transferred into cultural voids when they reach places like Egypt and Lebanon. Rather, local considerations, be they cultural, social, economic, or political, shape and sometimes curtail the way these Western-generated reproductive technologies are both offered to and received by non-Western subjects. Thus, the assumption on the part of global producer nations that ARTs—as value-free, inherently beneficial medical technologies—are "immune" to culture and can thus be appropriately transferred and implemented anywhere and everywhere is subject to challenge once local formulations, perceptions, and actual consumption of these technologies are taken into consideration.

Indeed, the global spread of ARTs provides a particularly salient but little discussed example of what anthropologist Arjun Appadurai has termed a "technoscape," or the "global configuration, also ever fluid, of technology, and the fact that technology, both high and low, both mechanical and information, now moves at high speeds across various kinds of previously impervious boundaries." Appadurai reminds us that this movement of technologies around the globe is both a deeply historical and inherently *localizing* process. In other words, globalization is not enacted in a uniform manner around the world, nor is it simply culturally homogenizing—necessarily "Westernizing" or even "Americanizing" in its effects. The global is always imbued with local meaning, such that local actors, living their everyday lives at particular historical moments in particular places, mold the very form that global processes take.

This acknowledgment of the importance of locality in the global dispersion of modern biotechnologies has been a theme of much recent work in gender, globalization, and health, particularly in the anthropology of reproduction. In Conceiving the New World Order: The Global Politics of Reproduction, Faye Ginsburg and Rayna Rapp argue that the global technoscape through which new reproductive technologies spread is an uneven terrain, in that some nations and regions within nations have achieved greater access to these fruits of globalization than others.³ Ginsburg and Rapp have employed the term "stratified reproduction" in an attempt to get at these transnational inequalities, whereby some are able to achieve their reproductive desires, often through recourse to globalizing technologies, while others (usually poor women of color around the globe) are disempowered and even despised as reproducers. However, as Ginsburg and Rapp are quick to point out, the power to define reproduction is not necessarily unidirectional—flowing from the West, with its money and technology, to the rest of the world. Rather, "people everywhere actively use their cultural logics and social relations to incorporate, revise, or resist the influence of seemingly distant political and economic forces." Thus, it is important to ask how Third World recipients of global technologies resist their application, or at least reconfigure the ways in which these technologies are to be adopted in local cultural contexts.

Middle Eastern Resistances to ICSI

The goal of this chapter is to highlight the local reactions and resistances to the introduction of a global reproductive technology—namely, ICSI—in the Middle Eastern region in 1994. Over the past decade, ICSI has proven to be a fairly revolutionary means of overcoming male infertility, a condition that contributes to more than half of all cases of infertility globally, but which is generally untreatable by conventional medical means.⁵ With ICSI, infertile men with very poor sperm profiles—even azoospermia, or lack of sperm in the ejaculate—are now able to produce biological children of their own. As long as a single viable spermatozoon can be retrieved from a man's body, including through painful testicular aspirations and biopsies, this spermatozoon can be injected directly into the ovum under a high-powered microscope. This "microscopic injection" essentially "forces" fertilization to occur from otherwise nonviable sperm. For infertile men with otherwise healthy fertile wives, ICSI has provided a long sought-after solution to childlessness, and has, in fact, led to the creation of thousands of healthy ICSI babies worldwide. Furthermore, ICSI has decreased the reliance on sperm donation and adoption as alternatives to family formation.

It is important to point out that both sperm donation and legal adoption are prohibited by Islamic law throughout most of the Middle Eastern region. In the absence of these alternatives, might Middle Eastern men be particularly willing to use ICSI to overcome their infertility? The answer to that question is both "yes" and "no." Placing ICSI in local cultural context in the Muslim Middle Eastern region necessitates highlighting the resistances to this biotechnology, some of which are based on the stigma of male infertility itself, as well as moral anxieties surrounding the use of ARTs in general.

Yet, the increasing popularity of ICSI—and, with it, the "outing" of male infertility as a male reproductive health problem—has led to new and surprising forms of resistance to be documented in this chapter. As I argue here, men are resisting the traditional gender scripts that implore them to divorce their reproductively aging wives. In ART centers in Lebanon, for example, infertile men whose wives are too old to undergo the ICSI procedure are accepting donor eggs in order to preserve their marriages to the

wives they love. For Muslim men, this act of love is socially transgressive and thoroughly resistant, for reasons that are described in this chapter. Thus, this chapter seeks to highlight how the globalization of ICSI to the Middle Eastern region has engendered resistance to ICSI itself, based on stigma and other local arenas of constraint, as well as resistance to traditional gender scripts, which could not have happened without the globalization of ICSI to this part of the world. In other words, the globalization of ICSI to the Middle East has engendered dual, and somewhat opposing, forms of male resistance, with implications on men's and women's lives and well-being that are profound.

Male Infertility, Stigma, and Resistance

To understand Middle Eastern men's resistances to ICSI—particularly in the mid-1990s when the technology was first introduced into the region—it is necessary to understand the stigma surrounding male infertility. Indeed, studies from around the world have shown male infertility to be among the most stigmatizing of male health conditions.⁷ Such stigmatization is clearly related to issues of sexuality. Male infertility is popularly, although usually mistakenly, conflated with impotency, as both disrupt a man's ability to impregnate a woman and to prove one's virility, paternity, and manhood.⁸

Little, if any, social scientific research has explicitly focused on the subject of male infertility among Middle Eastern men. Yet, Middle Eastern men may also suffer over their infertility, for a number of important reasons. First, on a social structural level, men living in pronatalist Middle Eastern communities are expected to have children, as reflected in the relatively high marriage and fertility rates across the region.9 Middle Eastern men achieve social power in the patriarchal, patrilineal, patrilocal, endogamous extended family through the birth of children, especially sons, who will perpetuate patrilineal structures into the future. 10 "Intimate selving" in Arab families involves expectations of "patriarchal connectivity,"11 whereby men assume patriarchal power in the family not only with advancing age and authority, but through the explicit production of offspring, who they love and nurture, but also dominate and control. Thus, in this region of the world, which "with some truth, is still regarded as one of the seats of patriarchy,"12 men who do not become family patriarchs through physical and social reproduction may be deemed weak and ineffective and may be encouraged to take additional wives in order to contribute to the patrilineage and to prove their masculine virility.¹³ In addition, a repeating theme in the growing literature on Middle Eastern

masculinities is one of homosocial competition between men in the realms of virility and fertility, which are typically conflated. ¹⁴ Thus, the experience of male infertility for a Middle Eastern man can only be imagined as an extremely threatening and emasculating condition, particularly in a region of the world where so-called hegemonic masculinities ¹⁵ are homosocially competitive and men work hard to sustain their public images as "powerful, virile" patriarchs. ¹⁶

My own studies, particularly in Egypt but also in Lebanon and Arab America, suggest that this may, in fact, be the case. ¹⁷ In Egypt, for example, few men in my study were willing to tell anyone, including their closest family members, that they suffered from male infertility. Male infertility was described variously as an "embarrassing," "sensitive," and "private" subject for the Egyptian male, who would necessarily feel *ana mish raagil*—"I am not a man"—if others were to know that he was the cause of a given infertility problem. Because of the association between infertility and threatened manhood, men's wives were generally expected to participate in a two-person cult of silence regarding the male infertility, which usually meant that women shouldered the blame for the infertility in public, as well as the responsibility for treatment seeking. Feeling humiliated and emasculated by their infertility, many men preferred to keep this stigmatizing health condition secret, refusing to seek treatment or to squander their hard-earned money on an uncertain ICSI attempt.

ICSI and Local Moral Resistance

Indeed, ICSI is an expensive technique (at local rates of about US \$2,000–\$5,000 per cycle), easily accessed only by middle- to upper-class elites in most Middle Eastern countries. Yet, it may represent the only hope for Muslim men to overcome their infertility. Why? In the Sunni Islamic world, contemporary Muslim religious scholars, following mandates originally set forth in the Islamic scriptures, have effectively disallowed alternative modes of family formation for infertile couples, including third-party donation of sperm, eggs, embryos, or uteruses as in surrogacy. For this reason, third-party donation is illegal in most Sunnidominant Middle Eastern countries, including Egypt, where it is simply not practiced in ART clinics. 20

Yet, it is important to point out the exception to the rule, which has affected the practice of IVF and ICSI in two Middle Eastern countries, namely Iran and Lebanon, as well as in Arab America. At the end of the 1990s, Iran's Ayatollah 'Ali Hussein Khamanei, the supreme jurisprudent of the minority Shi'a sect of Islam, issued a *fatwa*, or religious ruling,

approving of both egg and sperm donation for infertile Shi'ite couples, under certain conditions. Egg donor programs were subsequently initiated in Iran and in some of the clinics in Lebanon that cater to large Shi'ite populations.

Despite the permissive fatwa ruling, the notion of third-party gamete donation-and particularly the use of donor sperm—still does not meet with social acceptance among the vast majority of infertile Muslims, be they Shi'ite or Sunni. Clearly, the strong social prohibitions against sperm donation, which I found in both Egypt and Lebanon among Sunni and Shi'ite men alike, can be traced to patrilineal kinship ideologies and Islamic scriptural beliefs, which privilege patrilineal continuity and the importance of men's biological paternity. Or, to put it in the words of Egyptian and Lebanese male informants, a child produced from donor insemination (DI) "will not be my son." The questionable nature of such a DI child is reflected in Ayatollah Khamanei's own ruling: Namely, a DI child can be raised by, but not inherit from, its infertile social (as opposed to biological) father. Indeed, in 2003, sperm donation was officially outlawed by the Iranian parliament, thereby overturning Ayatollah Khamanei's fatwa ruling.21

Given these religious understandings and strong prohibitions against the uses of donor sperm, ICSI remains the only hope for most infertile Middle Eastern men. Yet, ICSI itself engenders a range of moral anxieties among Middle Eastern Muslim men, who may fear (un)intential sperm "mixing" and "mix ups" in Middle Eastern IVF laboratories. 22 In addition, infertile men also worry about the stigma that might surround their child if its "test-tube origins" were revealed, due to the popular societal assumption that a test-tube baby might be the product of donor gametes. Thus, the stigma and secrecy surrounding male infertility are compounded by the "technological stigma" of IVF/ICSI itself, which continues to be morally questionable because of lingering assumptions that something haram, or religiously sinful, is going on through the mixing of donor gametes in ART laboratories.

When I returned to the Middle East in 2003 to conduct a study of male infertility and ICSI in Lebanon, some of this moral stigma had lifted, showing that local reactions to biotechnologies may evolve over time. Whereas many infertile men were deeply reluctant to speak with me about their infertility problems, reflecting the ongoing emasculation associated with this condition,²³ the ART clinics in Lebanon were nonetheless overwhelmingly catering to male infertility cases (at least 60-70 percent of all patient couples), reflecting the increasing social acceptance of male infertility as a medical condition that could be solved through resort to ARTs.²⁴ Furthermore, much of the technological stigma surrounding ICSI had

dissipated, with far fewer men worrying about sperm mixing than they had in my earlier study in Egypt. Thus, in the Middle East over the past decade, ICSI has "come of age" as a technology that can help to solve the otherwise intractable and socially unacceptable condition of male infertility. Indeed, it could be argued that ICSI has helped to bring male infertility "out of the closet" in the Middle East. In clinics in Lebanon, for example, many men stated in interviews that male infertility is a medical problem, "like any other medical condition," and thus "has nothing to do with manhood." In short, ICSI has medicalized what was once a social condition, by offering a medical solution to the social problem of childlessness. In so doing, it has also salvaged infertile men's masculinity, allowing Middle Eastern men to conform to traditional gender scripts that equate manhood with fatherhood.

Resistance to Traditional Gender Scripts

However, ICSI has also allowed Middle Eastern men to transgress traditional gender scripts in other ways. In fact, ICSI-along with the new donor egg programs emerging in Shi'ite areas of the Middle East—is leading to quite remarkable social transformations, characterized by Muslim men's resistance to the traditional gender norms that allow (even encourage) men to divorce or marry polygamously in cases of childlessness.

As Mounira Charrad argues in States and Women's Rights: The Making of Postcolonial Tunisia, Algeria, and Morocco, Islamic personal status laws throughout the Muslim world lead to the essential "fragility of marital bonds."25 As she explains, "Far from fostering the development of longlasting, strong emotional ties between husband and wife, the law underplays the formation and continuity of independent and stable conjugal units. This shows in particular in the procedure to terminate marriage, the legality of polygamy, and the absence of community property between husband and wife."26 With regard to infertility, Charrad notes that the legality of polygamy allows a man to marry a second wife in the hope of having heirs, particularly sons. However, she also notes that despite Western stereotypes of widespread marital polygamy, polygamy is statistically insignificant in most Middle Eastern countries, practiced by only a few, generally less than 2 percent.

Despite the personal status laws permitting divorce and polygamy, a committed marriage is a highly valued and normatively upheld institution throughout the Middle East. While allowing for divorce, Islam clearly extols the virtues of marriage, regarding it as Sunna, or the way of the Prophet Muhammad. Thus, Middle Easterners are among the "most married" people in the world, ²⁷ with well over 90 percent of adults marrying at least once in a lifetime. Divorce rates are also relatively low, half the 50-percent rates found in the United States.

Furthermore, marriages in the Middle East are definitely evolving toward a companionate ideal, or what I have termed "conjugal connectivity."28 In my book Infertility and Patriarchy: The Cultural Politics of Gender and Family Life in Egypt, I draw upon anthropologist Suad Joseph's 29 provocative work on "patriarchal connectivity" in the Middle East—or the ways in which patriarchy operates through both male domination and deeply enmeshed, loving commitments between Arab patriarchs and their female and junior family members. According to Joseph, socialization ' within Arab families places a premium on connectivity, or the intensive bonding of individuals through love, involvement, and commitment. In the Arab world, family members are generally deeply involved with each other, expecting mutual love, exerting considerable influence over each others' lives, prioritizing family solidarity, and encouraging subordination of members' needs to collective interests. Persons are thus embedded in familial relational matrices that shape their deepest sense of self and serve as a source of security when the external social, economic, and political situation is uncertain, as is the case in much of the Arab world.

While Joseph's research focuses on the Arab family, my own work focuses on the couple, a social dyad for which there is no term in Arabic. Extending Joseph's analysis, I suggest that the loving commitments of patriarchal connectivity, which are socialized within the Arab family, also operate in the marital sphere. In my own work in Egypt and more recently Lebanon, I suggest that both men and women, including poor men and women, are negotiating new kinds of marital relationships—relationships based on the kind of loving connectivity experienced and expected in families of origin, but that has heretofore been unexpected and unexamined within the conjugal unit. That conjugal connectivity is true even among infertile Middle Eastern Muslim couples attests to shifting marital praxis and the importance of love, mutual respect, and the sharing of life's problems even in the absence of desired children. Despite widespread expectations within the Middle East that infertile marriages are bound to fail—with men necessarily blaming women for the infertility and divorcing or replacing them if they do not produce children, especially sonssuch expectations may represent indigenous stereotypes based on the aforementioned features of Islamic personal status law described by Charrad.³⁰ As I would argue instead, the success of so many infertile marriages in the Middle East bespeaks the strengthening of conjugal connectivity in resistance to patriarchy, which is being undermined. 31 Indeed, the tremendous growth of ARTs clinics in this region of the world over the past

two decades bespeaks the deep feelings of love, loyalty, and commitment experienced by many couples, including both husbands and wives in childless marriages.

However, it is important to note that the globalization of ICSI to the Middle Eastern region has also posed new marital possibilities for men and new marital vulnerabilities for women-with consequences on women's lives that are potentially profound.³²

Namely, middle-aged infertile men are generally married to middleaged women—the latter of whom may have "stood by" their infertile husbands for years, even decades in some cases, but may have grown too old to produce viable ova for the ICSI procedure. In the absence of adoption or of any kind of egg donation, infertile Muslim couples with a reproductively elderly wife face four difficult options: (1) to remain together permanently without children; (2) to legally foster an orphan, which is rarely viewed as an acceptable option; (3) to remain together in a polygamous marriage, which is rarely viewed as an acceptable option by the women themselves; or (4) to divorce so that the husband can have children with a younger wife.

Because of the Sunni Islamic restrictions on the use of donor eggs, at least some Muslim men are choosing to divorce or take a second wife, believing that their own reproductive destinies lie with younger, more fertile women. However, in my research in both Egypt and Lebanon, the first option has proven to be much more common—namely, infertile husbands and their forty-something wives often love each other deeply, and remain together in long-term marriages without producing any children. Thus, divorce is not the immediate consequence of infertility that it stereotypically is portrayed to be, including in the new era of ICSI.

Indeed, these technologies seem to be giving infertile couples, both Sunni and Shi'ite Muslims, new hope that their infertility problems can be overcome, thereby increasing sentiments of conjugal love and loyalty. For example, in Lebanon, where egg donor programs are now in place in some ART clinics, new marital scenarios are beginning to emerge as infertile husbands, particularly those of the Shi'ite faith, are beginning to accept the idea of donor eggs. Because Islam allows polygyny, or the taking of more than one wife, egg donation is being conceptually conflated with polygyny, whereby the egg donor becomes like a second wife to the husband. The growing acceptance of this practice in the complicated, multisectarian religious landscape of Lebanon has brought with it the possibility of new marital imaginaries still unthinkable in the more homogeneous Sunni Islamic environment of Egypt, where egg donation is firmly banned.

In short, the globalization of ICSI and donor egg technologies to parts of the Shi'ite Muslim world has fundamentally altered understandings of the ways in which marriages can be saved through the uses of ARTs. The "adventurous" attitude on the part of the otherwise conservative, male Shi'ite religious leaders toward third-party donation has led to a potential transformation in gender relations among infertile Muslim couples, who are clamoring for donor eggs in IVF clinics in Lebanon. Furthermore, in multi-sectarian Lebanon, the recipients of donor eggs are not necessarily only Shi'ite Muslim couples. Indeed, some *Sunni* Muslim patients from Lebanon and other Middle Eastern Muslim countries (as well as Christians couples of all sects) are quietly "saving their marriages" through the use of donor gametes, thereby secretly "going against" the dictates of Sunni Muslim orthodoxy.

Conclusion

The globalization of ICSI to the Middle East has been accompanied by local, moral, and gender responses that are rapidly evolving and that have major implications for women's well-being and security. Although the Sunni Muslim ban on third-party donation may be particularly disadvantageous to women—as some infertile men begin to replace their reproductively elderly wives in order to try the newest variant of ICSI with younger, more fertile women—divorce is not the inevitable consequence of infertility that it is stereotypically portrayed to be. Rather, as my research has shown, patriarchy is being undermined by infertile couples themselves, who are often choosing to remain in long-term, loving marriages, even in the absence of children.

In general, the tremendous growth of the ART industry in the Muslim Middle East is a testament to loving commitments, and particularly to men's resistances to traditional gender scripts that allow them to divorce or take additional wives. Furthermore, with the arrival of ICSI and now donor egg technologies in the region, many men have now overcome their initial resistances to these morally ambiguous technologies. They have also begun to rethink the meaning of male infertility and its connection to masculinity in their lives, as these technologies offer hope of medical solutions to the social problem of emasculating childlessness.

As ARTs such as ICSI become further entrenched in the Muslim world, and additional forms of global reproductive technology become available, it is important to interrogate new local moral dilemmas, as well as new manifestations of love and conjugal connectivity, that are likely to arise in response to this variant of globalization. Indeed, researchers interested in globalization and reproductive health need to prioritize the study of new reproductive technologies in multiple global sites, assessing how such

technologies affect *both* men and women as reproductive partners. Policy makers, furthermore, should question issues of access to these technologies—especially when, as in the case of male infertility, ARTs represent the only means of overcoming this intractable male reproductive health condition.

Ultimately, the case of ICSI—and the particular local responses that this global reproductive technology have engendered among men and women in the Middle East—reminds us of the importance of understanding the meaning of the "local in the global." This is a lesson that extends well beyond ICSI. In fact, it may apply to *all* new health technologies as they make their way around this large and locally varied globe.

Notes

* This chapter is based on nearly twenty years of multi-sited research on the globalization of assisted ARTs to the Middle East. Working in Egypt, Lebanon, and Arab America, I have conducted qualitative, ethnographic interviews with infertile Middle Eastern men and women, now totaling nearly 400 patient couples. I want to express my gratitude to these individuals for sharing their reproductive and marital lives with me, as well as to the physicians who have helped me with my study in seven different Middle Eastern ART clinics. This research was generously supported by the National Science Foundation and the U.S. Department of Education Fulbright-Hays Program. I also want to thank Kari Hartwig, for inviting me to participate in this seminal volume.

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