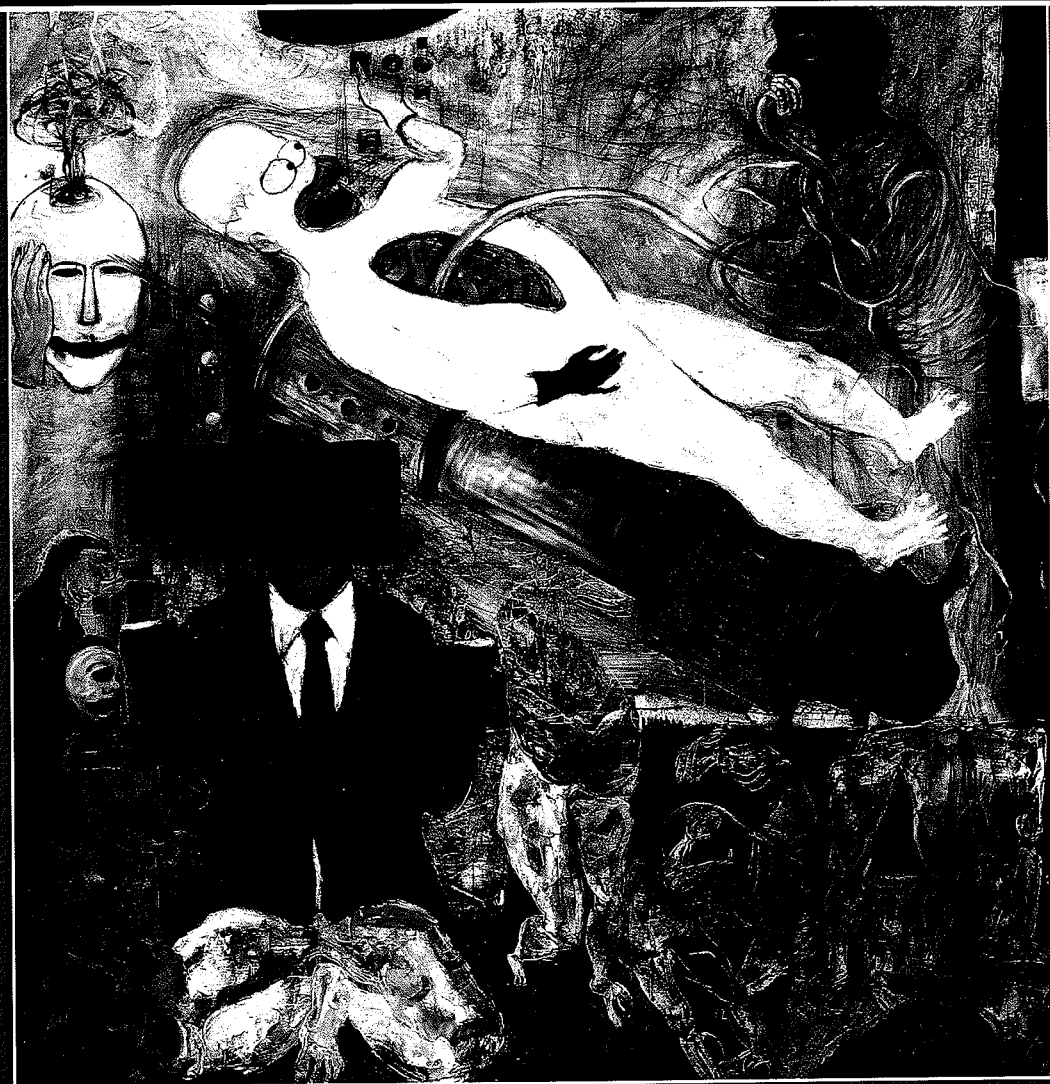


# A Reader in Medical Anthropology

Theoretical Trajectories, Emergent Realities

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# Quest for Conception

## Gender, Infertility, and Egyptian Medical Traditions

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### Sakina's Story

On a rainy day in late November 1988, Sakina sat weeping on a bench in a corridor of Shatby Hospital. Just told that both of her fallopian tubes were blocked and that the only way for her to achieve pregnancy was through in vitro fertilization (IVF), Sakina was inconsolable. Her worries were many. First, she feared the reaction of her husband, Hany, who was tired of spending his hard-earned money on her infertility therapies and who had told her three times over the past year that he planned to divorce her and remarry "for children" if she did not become pregnant soon. Second, she was concerned about the cost of IVF, given that her first instruction was to purchase two packets of medicine costing £E 350 (\$140) each. Having only £E 100 (\$40) left after selling her last gold bracelet for £E 300 (\$120), Sakina knew that she was definitely unable to afford IVF on her own and that Hany, with his small salary as a laborer in a textile factory, was probably unwilling and unable to finance this expensive therapy. Third, she was worried about the effect of IVF on her body. Although

as the daughter of a *dāya*, or traditional healer, she had already tried many painful ethnogynecological and biogynecological therapies, Sakina heard from other women in the hospital that the IVF doctors "took things from the tubes and put them back" and, frankly, she had no idea which "tubes" they were talking about or whether these tubes were the same ones that the doctor had said were "blocked" in her body. Fourth, as a Muslim woman, Sakina was uncertain about the acceptability of IVF in her religion. Although she suspected that IVF was not forbidden as long as "it's from the husband," she was uninformed about the opinions of religious experts on this subject and feared Hany's interpretation of the religious permissibility of the procedure. Finally, Sakina was extremely concerned about the reaction of her family and neighbors to her bringing home a "tubes baby" – a baby that might face perpetual ostracism if the nature of its creation was made known to the community. Thus, she realized that if she were to undertake IVF, she would have to keep this fact secret from everyone – except, of course, from her sympathetic mother.

However, of all of these concerns, Sakina's financial worries were the most immediate and were the ones that had made her burst into tears in the doctor's office. When the doctor told her to purchase the two packets of expensive medicine, she told him that she could not afford even one packet and would therefore be unable to undertake IVF therapy. He offered to provide one packet of the drug for free if she would agree to participate as a subject in his clinical study of IVF patients. Furthermore, he told her of a government pharmacy in midtown Alexandria where the drug could be purchased for only £E 220 (\$88). However, with only £E 100 (\$40) to her name, Sakina was still £E 120 (\$48) short.

A week after her despairing episode in the hospital, Sakina returned to Shatby, smiling, with a packet of the expensive IVF medication in hand. During the ensuing week, she had received *zakawāt*, or alms, from some upper-class Egyptians to whom she had told her sad story and who, taking pity on her, gave her the remaining £E 120 as a charitable donation. However, this did not solve all of Sakina's problems. For one, she had no refrigerator in which to store the sensitive drugs, and when she told the doctor that she had kept the packet of drugs at room temperature for several days, he admonished her for failing to follow his instructions. Second, she was told that the drugs she had purchased would be good for only "one trial" of IVF and that subsequent attempts to make a "tubes baby" would require additional medication.

Sakina's most serious problem, however, involved delays. Although she and other women with blocked tubes were told that the IVF procedure would begin at the hospital imminently, a month of waiting turned into two months, and then into three, and, eventually, a year. During this interval, Sakina and other women like her were advised by their physicians to resell their expensive medications, lest the drugs lose their therapeutic efficacy and the women lose their money.

Thus, more than a year after that fateful day in November 1988 when Sakina was told about her need for IVF, her dreams for a *tifl l-anābīb*, or a "baby of the tubes," were still not realized. For Sakina – and many other poor infertile

Egyptian women like her – a test-tube baby was, in fact, not in the making by the end of the 1980s.

### Test-Tube Babies on TV

By the end of 1988, when Sakina ventured to Shatby Hospital to earn of her need for IVF, the subject of IVF was familiar to many urban Egyptians, who recognized this assisted reproductive technology by the name *tifl l-anābīb*, literally, "baby of the tubes." Following an announcement in *Al-Ahram* newspaper in July 1987 of the first Egyptian "test-tube baby," the Egyptian media began to capitalize on Egypt's newest reproductive technology, in the form of factual discussions of the technique, debates over the religious permissibility of the procedure, and melodramatic television dramas about infertile women undergoing IVF. In fact, in a popular televised *tamsīliya*, a dramatic, fictional soap opera that aired in 1989, the story was told of a woman who spent thousands of Egyptian pounds undergoing IVF following years of hopeless infertility. Unfortunately, the protagonist was forced to remain in bed throughout her pregnancy – a false representation – and, at four months, she miscarried her "baby of the tubes" in a dramatic twist of fate.

This television show served as the primary means by which the Egyptian public learned about IVF, although the information conveyed about this new reproductive technology was flawed and viewers' understandings were thus extremely incomplete. Suddenly, women who had never before heard of "test-tube babies" were instant experts on the subject, having watched the soap opera and drawn rudimentary information from it. As one woman described it, "They take the *nutfā* from him, his back, and another from her, and they put it in a jar. And they put chemicals in to revive the dead worms, and the worms start to grow in a jar, and it becomes a child – not a jar like pickles, [but] like an aquarium where the child grows for seven to nine months, and they put it in a nursery. The woman has to stay on her back all the time."

Thus, following the airing of the *tamsīliya*, "*tifl l-anābīb*" became a household word in

Egypt, although, as apparent in this woman's description, few Egyptians understood much about how "babies of the tubes" were actually created or how many had been born in Egypt. The misleading rumor that many test-tube babies had in fact been born in the country was perpetuated by publicity surrounding the eventual birth in Cairo of IVF quadruplets to a woman who had been infertile for seventeen years.

Although most of the national publicity about IVF in Egypt emanated from Cairo, where the first private IVF center was established in 1986 (Serour, El Ghar, and Mansour 1990), Alexandria, too, became the site of major IVF activity, with the emergence of both a private IVF clinic and a public program at the government's military hospital. However, both of these IVF pilot programs failed to produce any "babies of the tubes" and were discontinued almost immediately.

Nevertheless, having begun a successful AIH (artificial insemination by husband) program, administrators at Shatby Hospital decided to continue with plans to expand their assisted reproductive technology program to include IVF. Laboratory supplies necessary for IVF were ordered from abroad; extra laboratory personnel were hired; research projects involving IVF were designed; and IVF candidates such as Sakina were selected from the patient population and enlisted in the IVF program. Furthermore, as noted previously, a widely read national news-magazine called *October* – equivalent to *Time* or *Newsweek* in the United States – announced in a lengthy article that Shatby Hospital had begun its own "baby of the tubes" program. This article alone brought hundreds of women to the hospital hoping to undergo IVF. Some were women who had undergone unsuccessful IVF trials in Cairo or Alexandria; some were women who had discovered that they could not afford the costs associated with IVF in a private center; and some were simply infertile women who thought that a "baby of the tubes" might provide the long-awaited solution to their infertility problems.

Of the hundreds of infertile women who came to Shatby seeking IVF, only a small number (including 15 percent of the infertile women in this study), actually entered the IVF program as

candidates. Most of these women were those with confirmed bilateral tubal obstruction, for whom AIH was not possible and IVF was their only real hope for achieving pregnancy.

### Women's Concerns

Yet, for these women, most of whom were poor, their eagerness to undergo IVF was tempered by numerous practical and moral concerns, similar to those described for AIH, but of a slightly different order. Their questions about IVF, as we shall see, revolved not only around its expense and religious permissibility, but around the complicated "mechanics" of a new reproductive technology in which the technological imperative of biomedicine is perhaps quintessentially embodied.

#### What kind of "tube"?

Many Egyptians, both men and women alike, were troubled by IVF because of the difficult question of "tubes." As we have seen, many Egyptian women had heard about women's "tubes" (that is, fallopian tubes) and realized that their blockage constituted a major infertility problem. Yet, the structure and function of these tubes and their location in relation to other female reproductive organs were subjects only partially understood by most women, who viewed the uterus and ovaries as the major female reproductive parts. As IVF became popularized in Egypt, however, many women came to realize that "babies of the tubes" were for infertile women with blocked tubes. But were these "tubes" of the same kind?

After seeing the soap opera, many Egyptians came to surmise that the term "baby of the tubes" actually referred to babies conceived and even interned in glass tubes during the course of gestation. Naturally, the thought of babies "artificially produced" in glass test tubes was one most disturbing to Egyptian men and women, whose convictions about the necessity of natural, God-given conception, childbirth, and parent-child ties were extremely strong. As a result, many Egyptians suspected that IVF was most certainly *ḥarām*, or forbidden,

as reflected in women's discourse on the subject. As women explained:

They've just invented test tubes and everything two years ago. I consider a child brought this way not to be my own child. It's not the same as when you carry a child in your body. These artificial ways don't feel the same – the tenderness and love.

It's not the same as when you carry the child inside you and suffer with it. It's as if you're taking it from someone else. It grows outside the womb of the mother, so it's like going and getting it "ready-made."

They say they put a tube into the woman and after nine months, she delivers normally. But what would the father feel? If the father does have a child, will he still love the one of the test tube? This is *ḥarām*, of course, because God stopped your pregnancy, so you come and put in tubes? It's as if you're saying, "God didn't give me, so we'll get her pregnant."

A number of important themes emerge from these and other women's statements. First, women were extremely concerned about the "artificial versus natural" creation of fetuses "outside versus inside" women's bodies. In a Muslim country where adoption is prohibited by Islamic law, parenthood is synonymous with "natural" (that is, biological) parenthood, which, for most Muslims, is tantamount to the gestation *inside a woman's body* of her own husband's fetus. Fetuses that are viewed as being gestated outside the woman's body – even if produced through the conceptive substance(s) of husband and wife – are not only deemed unnatural, but, like orphans, would be viewed as strangers by a husband and wife, who will therefore lack appropriate parental sentiments. In addition, many women feared the unknown aspects of IVF, including the dubious origin of the products of conception used in the procedure (which, unlike AIH, could come from both male, and female donors); the excessive experimentation on women's bodies, and the tampering with natural processes best left to God. Indeed, women's ultimate fears were of God himself, whose will would be defied if human beings were to attempt to "play God" through the production of man-made babies.

In addition, as reflected in women's statements, considerable confusion existed over the mechanics of IVF, fueling women's concerns about the artificiality of the process, especially the perplexing aspect of prolonged extracorporeal gestation. Given the lack of disclosure on the part of physicians, even women who were being considered or prepared for the procedure could only speculate as to the technical aspects of IVF, based on what they could deduce from the news media, from the infamous soap opera, or from physicians' veiled comments. Because these sources provided only cursory explanations, most women's understandings about the nature of IVF were superficial at best.

Women who were better informed about the mechanical aspects of IVF understood that the procedure involved the initial creation of the embryo outside of the woman's womb through a process that involved extraction of the woman's reproductive component (although few were sure of what this was) and mixture of this component with the husband's component (either "worms," "fluid," or "spermatic animals") in a glass container, or tube. After some period of time, ranging in women's minds from twenty-four hours to three months, the fetus, kept in a "machine" or "incubator" during this period "outside," was returned to the woman's uterus through a process of "injection," as in AIH.<sup>1</sup>

Yet, even women who understood the basic aspects of the procedure were often misinformed about important details. As one such woman explained, "The first thing, they get the sperm. They take one of the eggs out. They mix it in something that looks like a uterus, a glass or a tube. Then they ask her if she wants a boy or a girl. They choose the right worm, and they put it in the thing that looks like the uterus of the woman, and they leave it for three months. After that, they do a very small operation with two stitches and put it back in her uterus. Then she is pregnant."

Women who had some idea about the technical aspects of IVF were usually less likely to view the procedure as morally or religiously forbidden, as an act "going against God." In fact, these women, most of whom were infertile, were more likely to laud IVF as the best

exemplar of medical progress. As one such advocate of high-tech reproductive medicine explained, "Now medicine is very advanced. In the old days, lots of people couldn't have kids. But now we have 'tubes babies.'" Another commented, "We see that infertility was there ever since the Prophet's time, only then they didn't have test tubes and things that they have now. So now a woman can go and plant a child in a test tube and have her own baby, but she couldn't do that long ago. This is because science has become very advanced."

### Accepted by Islam?

Because of their superior knowledge of the technical aspects of the IVF procedure – including the use of a husband's sperm and wife's ova – infertile women were also more likely than others to accept IVF as religiously permitted. Although a *fatwā*, or formal Islamic legal opinion, on the permissibility of IVF was issued by the grand *shaikh* of Al-Azhar Mosque, Shaikh Gad El Hak Ali Gad El Hak, as early as March 23, 1980 (El Hak 1981), few Egyptians were aware of the *shaikh's* pronouncement even by the end of the decade. In his opinion, the *shaikh* clearly specified that IVF was an acceptable line of treatment as long as it was carried out by expert scientists with sperm from a husband and eggs from a wife with "no mixing with other cells from other couples or other species, and ... the conceptus is implanted in the uterus of the same wife from whom the ova were taken" (Aboulghar, Serour, and Mansour 1990).

Infertile women who were being considered for IVF tended to be best informed about this theological opinion, having sought advice from religious clerics in some cases. Yet, many women, both infertile and fertile, continued to doubt that Islam would permit such a "strange and unnatural" act as the creation by physicians of a "ready-made child" from "outside the womb." As with AIH, women's husbands tended to be even more doubtful, creating problems for women who were thus thrust into the position of convincing their husbands of IVF's religious permissibility.

However, many Egyptians' anxieties about the religious permissibility of IVF were relieved

when the popular televised Muslim cleric, Shaikh Muhammad Mitwali al-Shaarawi, condoned the use of IVF (with husbands' sperm and wives' ova) as a last resort for infertile couples. Yet, many Egyptians – and especially the fertile, who were less attuned to such matters – were not aware of Shaarawi's statements, as reflected in the high percentages of those who believed IVF to be *ḥarām* or were unsure of its religious permissibility.

### How successful is IVF?

In addition to these moral-religious concerns, another major question in the minds of infertile women was whether or not IVF was successful in most cases. For poor women, such information was crucial, given the expense of the procedure. As with AIH, women were usually shocked to learn that IVF was not free, even in a public hospital, and that the major expense revolved around purchasing ovulation-inducing agents that could cost anywhere from five hundred to one thousand Egyptian pounds (two hundred to four hundred dollars) per treatment cycle. This problem of expense was coupled with the problem of availability; ... "new-age" ovulation-inducing agents necessary for IVF were often obtained from abroad and were not widely available in most Egyptian pharmacies.

When women being prepared for IVF learned that one thousand pounds might purchase them only one trial of IVF – and that up to six trials might be necessary without any guarantee of reproductive success – their enthusiasm for the procedure naturally waned. For this reason, success rates were rarely conveyed by physicians, although women were obviously curious to know whether amounts exceeding one thousand pounds would "buy" them a baby. Women often noted that they would spend all the money they could muster on IVF if only it would guarantee them a pregnancy outcome. What they were rarely told, however, was that pregnancy rates in the world's best IVF centers were often less than 30 percent (Jones 1988), and that success rates in start-up programs, such as the one at this hospital, could be expected to be much less. In essence, then, Egyptian women being prepared

for IVF had minimal guarantees of success, although most of them did not realize this.

### How soon, if ever?

Given that many women with bilateral fallopian tubal blockage came to view IVF as their last resort – their “only hope” in their quest for conception – the realization that the highly touted IVF program had yet to become a reality at the hospital more than a year after its promised inception was also a source of frustration and fear for many women, especially those like Sakina who had promptly purchased expensive IVF drugs in preparation for the procedure. When women who had purchased these drugs were told to “sell them back” to pharmacies before their expiration dates, IVF candidates began to panic, criticizing the hospital for false advertising of its program. Questions that had once been framed by IVF candidates as “how soon?” came to be posed as “will there ever be?” Unfortunately, by the end of the 1980s, IVF had yet to become a reality at Shatby Hospital, because of numerous political, economic, and logistical problems beyond the control of those who had hoped to make the IVF program a success.

### Epilogue

After many delays, the long-awaited inception of the IVF program at Shatby Hospital occurred in the early months of 1991, almost two and a half years after the announcement of the program in *October* magazine. The equipment necessary to run an IVF laboratory was slow in coming to Alexandria, but by early 1991, it had arrived, and soon thereafter the IVF laboratory and an accompanying andrology laboratory for high-tech semen analysis were in place. A team of young physicians, several of whom were trained in IVF in the United States and Great Britain, was assembled to run the assisted reproduction program (both AIH and IVF) in the hospital.

The first delivery of an Alexandrian “baby of the tubes” occurred in early 1992, only ten months after the IVF program’s inception. The baby was delivered by cesarean by the

gynecology professor who had referred the case, and members of the Egyptian media, including those from the television, radio, newspapers, and magazines, were received during the delivery by the head of the IVF program, who was also the chairman of the University of Alexandria Department of Obstetrics and Gynaecology.

In addition, at the time of this writing, there are five or six ongoing IVF pregnancies at Shatby Hospital, other than those that have ended in spontaneous abortion. However, there have been some problems in following the IVF pregnancies, because many of the infertile women in the program consider it shameful to have become pregnant through IVF and therefore do not return to the hospital when they discover that they are pregnant with a “baby of the tubes.”

It is important to point out in closing that, even as IVF has successfully unfolded in Alexandria, many daunting questions about the implementation and future of IVF in Egypt – similar to those raised by concerned feminists in the West – remain. For example, will the focus on IVF divert attention away from the primary prevention of infertility in Egypt, especially among the poor, who are at greatest risk for infertility but who can least afford the new reproduction technologies? Will the commercialization of IVF in Egypt lead to the proliferation of for-profit clinics run by unscrupulous physicians, whose *raison d'être* is financial gain rather than the reproductive success of women? Will success rates be inflated and massaged in Egypt as they are elsewhere to boost the spirits of physicians and to encourage persistence among patients? Will the choice to undergo IVF turn into pressure for Egyptian women, who will be “compelled to try” IVF over and over again and hence become trapped in endless infertility careers? Will IVF lead to the commodification of life in Egypt, with perfect babies being manufactured and purchased for a significant price only by the affluent? Will IVF reinforce existing patriarchal, pronatalist biases in Egypt, leading to the continuing disenfranchisement of infertile women who have failed in their mandate to reproduce? Will IVF lead to further untoward manipulation of and experimentation on Egyptian women’s bodies,

such that embryos become the “leading actors” and women mere “living laboratories” for the products of man-made conception? And, finally, will the effectiveness and safety of IVF be monitored in Egypt, given the current absence of professional or consumer bodies concerned with technology assessment and biomedical ethics?

Although the future of IVF in Egypt is quite uncertain, perhaps it is heartening to realize that ethical debates about research in human reproduction have begun to emerge in Egypt and elsewhere in the Muslim world (Anees 1989; Serour 1992), leading to the development of incipient guidelines and standards for the practice of IVF in both research and clinical settings (Serour and Omran 1992). Currently, Egypt leads the way in these efforts to forge a safe path for IVF and the other NRTs in the Muslim world and may very well serve as a model for other Muslim countries attempting to implement these technologies (Serour, El Ghar, and Mansour 1991). As Serour and his Egyptian colleagues note, the total Muslim population in the world is 1.14 billion (1988 estimate), mostly located in developing countries and particularly in Africa and Asia. If one considers that 24 percent of the population of developing countries consists of women of reproductive age and that 10 percent (on average) of all married women of reproductive age experience infertility, then approximately 27 million Muslim women may be currently infertile and may either accept or reject IVF treatment services as they become available (Serour, El Ghar, and Mansour 1991).

Thus, the experiences of poor infertile Egyptian women such as Sakina, as they attempt to grapple with the complex practical and moral dilemmas posed by IVF, may well serve as a guide for the therapeutic journeys of other Muslim women, whose voices and stories have yet to be heard.

### NOTE

- 1 The standard IVF protocol involves nine steps, occurring over four weeks (Harkness 1992), as follows: (1) a woman’s current menstrual cycle is halted with gonadotropin-releasing

hormone (GnRH) agonists; (2) ovulation is then induced through the administration of fertility drugs for eight to twelve days; (3) ultrasounds and blood tests are performed to monitor the development of ovarian follicles over a six- to twelve-day period; (4) serum progesterone levels are measured to assess the growth of the uterine lining; (5) mature eggs (usually at least four) are retrieved from the woman vaginally through ultrasound-guided aspiration of the follicles; (6) ova and sperm (obtained through the male partner’s masturbation) are prepared in the laboratory and then combined for fertilization and cell division over a period of about forty-eight hours; (7) embryos emerging through the fertilization process are transferred (injected by a catheter) into the woman’s uterus through the cervix within two days of egg retrieval; (8) the woman receives hormonal support, usually progesterone, for the first eight to ten weeks of pregnancy or until menstruation occurs; and (9) a pregnancy test is usually performed ten to twelve days after an IVF transfer.

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