

THEME EDITORIAL

Assisted reproductive technologies: Conundrums and challenges

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Infertility: Blame it on women

A few weeks ago, a leading multi-city IVF clinic published an advertisement in a leading news daily. The advertisement sounded ominous, "The longer you wait, the lower your chances" – it referred to one's chances of getting pregnant. The subtext was far too easy to decipher: the content was thoroughly gendered and directed solely at women, particularly at career-oriented women who delay their marriages and childbearing plans far too long, supposedly lowering their fertility in the process. It also sounded benevolent in its attempt to warn these "erring" women. It is socially accepted that women are responsible for increasing the infertility rates in the country by their "poor, untimely, and problematic prioritisation of life choices". While men produce sperm that are regenerative, a woman's reproductive potential is perpetually on a decline; born with a fixed number of egg cells, she never produces any more in her lifetime. However, male infertility is an interesting area to delve into; 40–50% of total infertility is male factor infertility (MFI) (1).

MFI is significantly on the rise (2), so much so that a team of researchers thought it prudent enough to invest their energies and funds in developing a technology that would allow the layman to screen semen for potency. This smartphone-based semen analyser is said to give results "with nearly 98% accuracy" (3). MFI is not a minuscule issue if we really want to engage with infertility per se, and the factors that doctors attribute to the spurt in MFI are "stress, pesticides, pollution, altered lifestyle" (2). The point here is that these factors are exactly the same as those used to analyse rising infertility among women. And yet, the infertility spotlight continues to glare disproportionately on women—and if the woman is one holding a white-collar job and living life on her own terms, people instantly jump in to chastise her and to save her, both at the same time.

Four pointers followed the warning in the advertisement: (a) the more years that pass, the fewer the eggs a woman has left, (b) the older one is at childbirth, the more difficult it is to carry a baby to term, (c) ovarian reserve starts to decline in the 30s, and (d) if one has tried for a year to conceive without success, it is time to seek fertility treatment¹. Men were not implicated at all. Infertility was all about eggs and child delivery; the sperm was forgiven. Seeing how the ad was designed—large font size and all in bright, blood red—I wondered if women would have the courage to wait even six months after marriage.

In-vitro fertilisation (IVF) is a fascinating, paradoxical space: commonly treated synonymously with assisted reproductive technologies (ART), this market sustains itself not just on the conditions of primary or acquired infertility, but significantly, on the "irresponsibility" of women who delay their childbearing plans. It is a market that thrives by criticising the very constituency that helps sustain it. The paradoxes go back a long way: Sarojini N and Vrinda Marwah point out how the Indian state, in a rather counterintuitive way, welcomed the advent of technologies that facilitate reproduction, viz the ARTs, in order to help the state achieve its earlier set target of stemming population growth (4). The Indian state was married to the idea of family planning right from 1951, and of the various methods it promoted and implemented, controversial and otherwise, tubal ligation was—and remains—a top choice. However, India also had a high neonatal and infant mortality rate², and women were known to resist tubal ligation. Against this backdrop, the promise of the ARTs showed the state a wonderful way out of the impasse. A 1984 Indian Council of Medical Research (ICMR) document observed,

If a couple is convinced that pregnancy could be achieved with certainty by the IVF-Embryo Transfer technique, in the event of their losing the existing children, they might readily accept tubal sterilization as a method of family planning. Thus, *in vitro* fertilization could be of great relevance to our national welfare programme. (As quoted in 4, p. 4; emphasis added)

It is indeed telling that right from its days of infancy in India, ARTs never had a linear relationship with the state-market. The state advocated for the acceptance of these technologies because of their indirect ability to make people accept sterilisation. But soon the state took a backseat, allowing the private sector to come to the fore, set prices, function without regulatory mechanisms, and make promises of high success rates for IVF. The ART market promised women they could "enjoy" life and only when they would

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wish to succumb to their maternal desires would it come to their rescue. Corporate giants such as Facebook, Apple, Google and some other global brands offered to pick up the tab if their employees or their spouses decided to freeze their eggs (5). People could freeze embryos too. The ARTs assured people—especially women—that they could turn the biological clock the other way around and definitely stop it for long stretches. It is thus nothing short of an irony that the market also took its turn to criticise these same women for delaying their childbearing plans.

The ART market is deeply gendered. The body, particularly the infertile or less fertile female body is spontaneously put on trial. Besides the medical concepts of primary and secondary infertility, the ARTs helped give birth to a specific form of infertility that was less physiological and more social, one that was triggered by choices and intentions – viz “voluntary infertility”. Such a labelling completely overlooks the working of social, economic, and other cultural factors that overdetermine the choices that an individual (in this case, an adult woman) makes or chooses not to make. When women were married off at 14 or 15 years of age and bore several children by the time they were hardly 25, voluntary infertility was not an issue, but we do not even need to discuss whether that was a better paradigm to inhabit. Needless to add, much of this idea of voluntary infertility is overhyped: A female acquaintance of mine, at 37 years of age, decided to go in for egg freezing since she was not ready to settle down right away. The doctor prescribed a battery of tests and eventually declared she had very low ovarian reserves; the lady was too traumatised to go ahead with the procedure. She gave up, happened to meet someone, and got married a year later. At close to 40 years, greatly surprising herself, she realised she had conceived naturally; she went on to give birth to a full-term, 2.5 kg, healthy baby. Of course, there is a biology to us and women do stop ovulating after a certain age, and ovarian reserves are indeed limited, but the point is to not sacrifice all other coordinates on the altar of the biological.

The shifting sands of surrogacy in India

While in pre-ART times infertility was seen as a physiological limitation, and the ARTs transformed that into a social inability, the ARTs also, in a paradoxical twist, worked to impress upon us the deeply pathological nature of the infertile physiology that needed urgent redress. The advent of these technologies helped strengthen the desire for a child, even as the desire changed with progress in technology. The desire to have a child to continue one's lineage could be satisfied through adoption as well, but with the ARTs in place, the imperative became to have one's own child, and there were different ways one could experience “ownership” of the child: a woman could opt for an egg donor and give birth to the child, the child becoming her “own” through gestation and birth; one could have a genetic child by commissioning a surrogacy, connecting the child to the commissioning mother through genes, not the placenta. Ideas of blood connection gave way to demands for genetic connections in the ART universe; parenthood became possible for hitherto infertile couples, and the ARTs made it possible for a child to now have up to five parents (6).

The ART market in India grew exponentially since the turn of the millennium, and the process that was most bandied about was commercial surrogacy; India legalised commercial gestational surrogacy³ in 2002 (7) for couples and individuals, married or otherwise, Indians and non-Indians. However, in a decade's time, the Indian state rethought the scenario; it cut back on this vast landscape of free rein and banned commercial surrogacy for everyone except Indian married couples. Foreigners were banned because they, the state argued, were exploiting India's cheap labour and at times abandoning the children born; same-sex couples were banned because the Indian state did not recognise such unions in the first place. When in a few years' time the state decided to ban the commercial surrogate herself, it cited an unnuanced immediacy to rescue the poor woman from rich and exploitative Indian couples. The Union Cabinet passed the Surrogacy (Regulation) Bill in August 2016 (8); this Bill recommended only altruistic forms of gestational surrogacy provided the surrogate was a close family member of the intending couple, herself married and with at least one child. There were several other recommendations as well.

This Bill was marked by partially explained, ambivalent, and ambiguous arguments; different cohorts of stakeholders including providers, industry people, activists, academics, and surrogates pointed out the nuanced nature of the ground reality and argued how a blanket ban was far from the solution (9, 10). Of the several gaps, the primary conceptual one was the basic premise of the Bill - that a market transaction is inherently exploitative; in other words, that exploitation is a default fallout of financial transactions. Such a conclusion is not just naive and incomplete but also forecloses any urgency to examine the interplay of other coordinates that make a relation exploitative or otherwise. It is an extension of this fallacy that spells out the recommendation that the altruistic surrogate should be a family member of the intending couple. The drafters of the Bill seem to believe that since exploitation is only stimulated by economic exchange, if surrogacy arrangements take place within the boundaries of a family, without any monetary promise, they would be free from exploitation. Consequently, they fail to take into cognisance both how power operates within kinship structures and how psycho-social complexities inform a woman's position, especially in her marital home. Declining to take on the task of becoming a surrogate, as also insisting on stepping back after becoming pregnant, would be far more difficult for a close family member than it would be for a commercial surrogate. Previous versions of the draft ART Bill (2010) (11) had talked of the anonymity of the surrogate, while the 2016 Surrogacy Bill fails to explain how that would be accounted for were surrogacy to take place only within families.

These and many other points, gaps, and paradoxes were taken up in a detailed manner by the Parliamentary Standing Committee which presented its Report on August 10, 2017 (12). Among various recommendations, the Committee argued that the state should forego the altruistic clause and make way for compensated surrogacy arrangements, allow non-family members to become surrogates, provide robust medical and life insurances to the surrogate, and prioritise the best interests of the child born. Against the backdrop of the ART situation in India—which is far too dynamic and is positioned on shifting sands with a Bill and a Parliamentary Standing Committee waiting in the wings for a final decision—this ART-themed issue carries five commentaries by four authors to explore specific strands of the ART discourse for its complexities, contradictions, consequences, challenges, and promises, primarily in the Indian context but also in the context of another developing country in the global South, Nigeria.

The road ahead

In this theme issue, Timms examines the significance of the Surrogacy (Regulation) Bill, 2016 to ask if a country like India, marked by unequal resource distribution, non-robust legal mechanisms, a profit-driven service sector, and other forms of social inequity, can morally and ethically afford commercial surrogacy; in a separate piece, Timms analyses the Parliamentary Standing Committee Report, 2017 to unpack the ethical, legal, and social implications of the recommendations proposed by the Committee. Akintola and Egbokhare reflect on the varied dimensions and complexities of parenthood that the heightened uptake of ARTs throws up in Nigeria; the authors focus on the most important stakeholder in this entire process, the child who is born. Nigeria remains a context where wide availability of ART services combines with vague legislations—not unlike India. In her paper, Mitra seeks to understand how the foetus, especially in IVF pregnancies, has come to eclipse the rights and autonomy of the gestating woman; she locates her examination of women's agency and autonomy particularly in the contexts of commercial surrogacy and abortion rights in India. In a final commentary, Majumdar takes the discussion back to reflect on how the ART industry, through the very rhetoric it deploys, plays upon the fears and anxieties of the ageing (female) body. Even as the ARTs have converted infertility from a socio-cultural to a deeply pathological issue, the idea of the biological clock has taken on a new meaning in the light of what these technologies both promise and threaten us with.

We wait to see how, and when, the government gives concrete shape to the legislations on ARTs, and to the Surrogacy (Regulation) Bill, which came up almost overnight, but has been kept hanging for over a year now. The ARTs are not merely a conglomeration of technology that need to be monitored and governed, they are as much about desires and aspirations. They concern the lives of people, especially of women: the woman marginalised and stigmatised by her family and society for not being able to conceive; the woman determined to live life on her own terms and who plans to start a family a bit late in life; the woman who is economically constrained and considers becoming a surrogate; and the woman who might be coerced by her in-laws into becoming an altruistic surrogate against her will. The ARTs implicate all of them and others. It implicates bodies, desires, and identities, and it is an ethical imperative of the state to realise and appreciate these coordinates before implementing the ART Act.

Notes

- ¹ This was an advertisement by the NOVA Fertility Clinic, published in the *Times of India*, (Ahmedabad edition) on 28 November 2017. A website post by Malpani Infertility Clinic (MIC) (13) seconds such advertisements, arguing how such advertisements create awareness, not anxiety, among infertile people, who would in some likelihood walk into NOVA, but "most patients these days are smart" and they would check for other options; this would, reasons MIC, precipitate a "trickle-down effect, and all IVF clinics will benefit in the bargain, because a rising tide helps all ships".
- ² The under-5 mortality rate was around 250 in 1960, close to 200 in 1970, and hovered over 150 in 1980 (14). Given that in 2012 the under-5 mortality rate was 56 (15), we can imagine how high our under-5 mortality rates were in the 1980s, when the state thought IVF could be used to allay the fears of tubal ligation.
- ³ The idea of traditional surrogacy is said to have existed in India for ages. In traditional surrogacy, the surrogate is impregnated with the sperm of the intending male partner; in other words, the surrogate is also the genetic mother of the child born, while in an only-gestational surrogacy, there is no genetic connection between the woman and the embryo. The embryo is created using gametes from the intending couple or donors via IVF and implanted in the uterus of the gestational surrogate. Gestational surrogacy, when undergone against payment, becomes commercial gestational surrogacy, a process that India legalised in 2002, becoming one of the first and few countries to do so. However, if we move beyond genes, we realise that since the blood of the surrogate nourishes the embryo, an organic relation certainly gets established between them.

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Thank you, Reviewers!

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