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READINGS

IVF: The Simple Case

PETER SINGER

Singer addresses seven moral objections that have been lodged against in vitro fertilization (IVF), focusing on its use in the "simple case" ("a married, infertile couple use an egg taken from the wife and sperm taken from the husband, and all embryos created are inserted into the womb of the wife"). The objections include the charges that IVF is unnatural, that it is risky for the offspring, and that it separates the procreative and conjugal aspects of marriage and so damages the marital relationship. He concludes that all the objections are weak and that "[t]hey should not count against going ahead with IVF when it is the best way of overcoming infertility" and when the infertile couple decides against adoption.

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The so-called simple case of IVF is that in which a married, infertile couple use an egg taken from the wife and sperm taken from the husband, and all embryos created are inserted into the womb of the wife. This case allows us to consider the ethics of IVF in itself, without the complications of the many other issues that can arise in different circumstances. Then we can go on to look at these complications separately.

The Technique

The technique itself is now well known and is fast becoming a routine part of infertility treatment in many countries. The infertile woman is given a hormone treatment to induce her ovaries to produce more than one egg in her next cycle. Her hormone levels are carefully monitored to detect the precise moment at which the eggs are ripening. At this time the eggs are removed. This is usually done by laparoscopy, a minor operation in which a fine tube is inserted into the woman's abdomen and the egg is sucked out up the tube. A laparoscope, a kind of periscope illuminated by fiber optics, is also inserted into the abdomen so that the surgeon can locate the place where the ripe egg is to be found. Instead of laparoscopy, some IVF teams are now using ultrasound techniques, which eliminate the need for a general anesthetic.

Once the eggs have been collected they are placed in culture in small glass dishes known as Petri dishes, not in test tubes despite the popular label of "test-tube babies." Sperm is then obtained from the male partner by means of masturbation and placed with the egg. Fertilization follows, in at least 80 percent of the ripe eggs. The resulting embryos are allowed to cleave once or twice and are usually transferred to the woman some 48 to 72 hours after fertilization. The actual transfer is done via the vagina and is a simple procedure.

It is after the transfer, when the embryo is back in the uterus and beyond the scrutiny of medical science, that things are most likely to go wrong. Even with the most experienced IVF teams, the majority of embryos transferred fail to implant in the uterus. One pregnancy for every five transfers is currently considered to be a good working average for a competent IVF team. Many of the newer teams fail to achieve anything like this rate. Nevertheless, there are so many units around the world now practicing IVF that thousands of babies have been produced as a result of the technique. IVF has ceased to be experimental and is now a routine, if still "last resort" method of treating some forms of infertility.

Objections to the Simple Case

There is some opposition to IVF even in the simple case. The most frequently heard objections are as follows:

1. IVF is unnatural.
2. IVF is risky for the offspring.
3. IVF separates the procreative and the conjugal aspects of marriage and so damages the marital relationship.
4. IVF is illicit because it involves masturbation.
5. Adoption is a better solution to the problem of childlessness.
6. IVF is an expensive luxury and the resources would be better spent elsewhere.
7. IVF allows increased male control over reproduction and hence threatens the status of women in the community.

We can deal swiftly with the first four of these objections. If we were to reject medical advances on the grounds that they are "unnatural" we would be rejecting modern medicine as a whole, for the

very purpose of the medical enterprise is to resist the ravages of nature which would otherwise shorten our lives and make them much less pleasant. If anything is in accordance with the nature of our species, it is the application of our intelligence to overcome adverse situations in which we find ourselves. The application of IVF to infertile couples is a classic example of this application of human intelligence.

The claim that IVF is risky for the offspring is one that was argued with great force before IVF became a widely used technique. It is sufficient to note that the results of IVF so far have happily refuted these fears. The most recent Australian figures, for example, based on 934 births, indicate that the rate of abnormality was 2.7%, which is very close to the national average of 1.5%. When we take into account the greater average age of women seeking IVF, as compared with the childbearing population as a whole, it does not seem that the *in vitro* technique itself adds to the risk of an abnormal offspring. This view is reinforced by the fact that the abnormalities were all ones that arise with the ordinary method of reproduction; there have been no new "monsters" produced by IVF.[1] Perhaps we still cannot claim with statistical certainty that the risk of defect is no higher with IVF than with the more common method of conception; but if the risk is higher at all, it would appear to be only very slightly higher, and still within limits which may be considered acceptable.

The third and fourth objections have been urged by spokesmen for certain religious groups, but they are difficult to defend outside the confines of particular religions. Few infertile couples will take seriously the view that their marital relationship will be damaged if they use the technique which offers them the best chance of having their own child. It is in any case extraordinarily paternalistic for anyone else to tell a couple that they should not use IVF because it will harm their marriage. That, surely, is for them to decide.

The objection to masturbation comes from a similar source and can be even more swiftly dismissed. Religious prohibitions on masturbation are taboos from past times which even religious spokesmen are beginning to consider outdated. Moreover, even if one could defend a prohibition on masturbation for sexual pleasure—perhaps on the (very tenuous) ground that sexual activity is wrong unless it is directed either toward procreation or toward the strengthening of the bond between marriage partners—it would be absurd to extend a prohibition with that kind of rationale to a case in which masturbation is being used in the context of a marriage and precisely in order to make reproduction possible. (The fact that some religions do persist in regarding masturbation as wrong, even in these circumstances, is indicative of the folly of an ethical system based on absolute rules, irrespective of the circumstances in which those rules are being applied, or the consequences of their application.)

Overpopulation and the Allocation of Resources

The next two objections, however, deserve more careful consideration. In an overpopulated world in which there are so many children who cannot be properly fed and cared for, there is something incongruous about using all the ingenuity of modern medicine to create more children. And similarly, when there are so many deaths caused by preventable diseases, is there not something wrong with the priorities which lead us to develop expensive techniques for overcoming the relatively less serious problem of infertility?

These objections are sound to the following extent: in an ideal world we would find loving families for unwanted children before we created additional children; and in an ideal world we would clear up all the preventable ill-health and malnutrition-related diseases before we went on to tackle the problem of infertility. But is it appropriate to ask, of IVF alone, whether it can stand the test of measurement against what we would do in an ideal world? In an ideal world, none of us would consume more than our fair share of resources. We would not drive expensive cars while others die for the lack of drugs costing a few cents. We would not eat a diet rich in wastefully produced animal products while others cannot get enough to nourish their bodies. We cannot demand more of infertile couples than we are ready to demand of ourselves. If fertile couples are free to have large families of their own, rather than adopt destitute children from overseas, infertile couples must also be free to do what they can to have their own families. In both cases, overseas adoption, or perhaps the adoption of local children who are unwanted because of some impairment, should be considered; but if we are not going to make this compulsory in the former case, it should not be made compulsory in the latter.

There is a further question: to what extent do infertile couples have a right to assistance from community medical resources? Again, however, we must not single out IVF for harsher treatment than we give to other medical techniques. If tubal surgery is available and covered by one's health insurance, or is offered as part of a national health scheme, then why should IVF be treated any differently? And if infertile couples can get free or subsidized psychiatry to help them overcome the psychological problems of infertility, there is something absurd about denying them free or subsidized treatment which could overcome the root of the problem, rather than the symptoms. By today's standards, after all, IVF is not an inordinately expensive medical technique; and there is no country, as far as I know, which limits its provision of free or subsidized health care to those cases in which the patient's life is in danger. Once we extend medical care to cover cases of injury, incapacity, and psychological distress, IVF has a strong claim to be included among the range of free or subsidized treatments available.

The Effect on Women

The final objection is one that has come from some feminists. In a recently published collection of essays by women titled *Test-Tube Women: What Future for Motherhood?*, several contributors are suspicious of the new reproductive technology. None is more hostile than Robyn Rowland, an Australian sociologist, who writes:

> Ultimately the new technology will be used for the benefit of men and to the detriment of women. Although technology itself is not always a negative development, the real question has always been—who controls it? Biological technology is in the hands of men.[2]

And Rowland concludes with a warning as dire as any uttered by the most conservative opponents of IVF:

> What may be happening is the last battle in the long war of men against women. Women's position is most precarious . . . we may find ourselves without a product of any kind with which to bargain. For the history of "mankind" women have been seen in terms of their value as childbearers. We have to ask, if that last power is taken and controlled by men, what role is envisaged for women in the new world? Will women become obsolete? Will we be fighting to retain or reclaim the right to bear children—has patriarchy conned us once again? I urge you sisters to be vigilant.

I can see little basis for such claims. For a start, women have figured quite prominently in the leading IVF teams in Britain, Australia, and the United States: Jean Purdy was an early colleague of Edwards and Steptoe in the research that led to the birth of Louise Brown; Linda Mohr has directed the development of embryo freezing at the Queen Victoria Medical Centre in Melbourne; and in the United States Georgeanna Jones and Joyce Vargyas have played leading roles in the groundbreaking clinics in Norfolk, Virginia, and at the University of Southern California, respectively. It seems odd for a feminist to neglect the contributions these women have made.

Even if one were to grant, however, that the technology remains predominantly in male hands, it has to be remembered that it was developed in response to the needs of infertile couples. From interviews I have conducted and meetings I have attended, my impression is that while both partners are often very concerned about their childlessness, in those cases in which one partner is more distressed than the other by this situation, that partner is usually the woman. Feminists usually accept that this is so, attributing it to the power or social conditioning in a patriarchal society; but the origin of the strong female desire for

children is not really what is in question here. The question is: in what sense is the new technology an instrument of male domination over women? If it is true that the technology was developed at least as much in response to the needs of women as in response to the needs of men, then it is hard to see why a feminist should condemn it.

It might be objected that whatever the origins of IVF and no matter how benign it may be when used to help infertile couples, the further development of techniques such as ectogenesis—the growth of the embryo from conception totally outside the body, in an artificial womb—will reduce the status of women. Again, it is not easy to see why this should be so. Ectogenesis will, if it is ever successful, provide a choice for women. Shulamith Firestone argued several years ago in her influential feminist work *The Dialectic of Sex*[3] that this choice will remove the fundamental biological barrier to complete equality. Hence Firestone welcomed the prospect of ectogenesis and condemned the low priority given by our male-dominated society to research in this area.

Firestone's view is surely more in line with the drive to sexual equality than the position taken by Rowland. If we argue that to break the link between women and childbearing would be to undermine the status of women in our society, what are we saying about the ability of women to obtain true equality in other spheres of life? I am not so pessimistic about the abilities of women to achieve equality with men across the broad range of human endeavor. For that reason I think women will be helped, rather than harmed, by the development of a technology which makes it possible for them to have children without being pregnant. As Nancy Breeze, a very differently inclined contributor to the same collection of essays, puts it:

> Two thousand years of morning sickness and stretch marks have not resulted in liberation for women or children. If you should run into a Petri dish, it could turn out to be your best friend. So rock it; don't knock it![4]

So to sum up this discussion of the ethics of the simple case of IVF: the ethical objections urged against IVF under these conditions are not strong. They should not count against going ahead with IVF when it is the best way of overcoming infertility and when the infertile couple are not prepared to consider adoption as a means of overcoming their problems. There is, admittedly, a serious question about how much of the national health budget should be allocated to this area. But then, there are serious questions about the allocation of resources in other areas of medicine as well.

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IVF and Women's Interests: An Analysis of Feminist Concerns

MARY ANNE WARREN

In this essay, Warren examines some feminist objections to IVF and other new reproductive technologies. Because of the risks and costs to women from IVF, she says, it is not at all clear that it provides a net benefit to them. But if the disadvantages do not clearly outweigh the possible benefits, "then the matter is properly left to individual choice," and it would be wrong to conclude that women's interests demand an end to research in IVF and related technologies. She finds no merit in the argument by some feminists that because of the pressure from patriarchal society for women to have children (the "pronatalist" attitude), women cannot give genuine voluntary consent to IVF treatments even if well informed. On the contrary, "Neither the patriarchal power structure nor pronatalist ideology makes women incapable of reasoned choice about childrearing."

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Thus far, little of the public and professional debate about the ethics of *in vitro* fertilization (IVF) and other new reproductive technologies (NRTs) has focused upon the possible negative effects of these technologies on women. There is endless discussion of the moral status of the fertilized ovum or pre-embryo, and its possible moral rights.[1] Theologians and nonreligious critics debate the propriety of conceiving human beings "artificially," that is, without heterosexual intercourse.[2] Concern is also voiced—and appropriately so—about the possible physical or mental effects of technologically assisted reproduction upon the resulting children. But with the exception of a small group of feminist critics, few have paid much attention to the dangers to the women who serve as experimental subjects in reproductive research and, indirectly, to all women.

In what follows, I will examine some of the feminist objections to IVF and other NRTs. I will argue that, although the NRTs pose some significant dangers for women, it would be wrong to conclude that women's interests demand an end to IVF and other reproductive research. But if we are to understand the ethics of IVF, we must ask not only whether it is in itself morally objectionable, but also whether it is (part of) an adequate societal response to the problem of involuntary infertility among women. IVF is at best a small part of a solution to that problem; it can help only a small minority of infertile women, and does nothing to address the underlying social causes which contribute to the problem. Moreover, the publicity surrounding IVF and other NRTs may deflect attention and resources from the potentially more important tasks of understanding and counteracting the preventable causes of infertility.

I. Feminist Criticisms: The Microlevel

Feminist critiques of the NRTs operate in part on the microlevel, that is, the level of individual behavior, individual rights and wrongs; and in part on the macrolevel, the level of historical context and social implications. I will begin with the microlevel criticisms.

At the microlevel, the primary issue is whether IVF is sufficiently beneficial to IVF patients to justify the commercial marketing of the procedure, or even continued research and development. IVF is usually depicted as an astonishing success story: infertile women are enabled to have beautiful, healthy children. We hear far less about the associated dangers. We do not yet know the long-term side effects of the use of drugs and hormones to induce superovulation. The collection of ova through abdominal surgery, usually under general anaesthesia, carries a significant risk of mortality or morbidity.[3] The replacement of the fertilized ovum in the uterus may cause infection, physical damage, or ectopic pregnancy. An abnormally high percentage of IVF pregnancies end in spontaneous abortion or stillbirth. There are additional risks to mother and infant, associated not with the IVF procedure itself but with the ways in which IVF pregnancies are generally monitored (e.g., through ultrasound, amniocentesis, and endometrial biopsy), and with the exceptionally high rate of cesarean section which is typical of IVF births.[4]

In addition to these physical risks, women who undergo IVF bear personal and psychological burdens. These include the emotional ups and downs inherent in the cycle of hope and disappointment; the disruption of work and, often, personal relationships; and the humiliation and depersonalization that may result from the submission to painful and