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Assisted reproduction

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Interest in assisted reproduction has sky-rocketed in the last fifteen or so years, promoted by social values and advancing reproductive technologies. Assisted reproduction includes specific approaches to reproduction that involve a third party in the normally two-person enterprise of making a baby. Current techniques include AID (artificial insemination by donor) and egg donation, IVF (*in vitro* fertilization) and the related technologies of GIFT (gamete intrafallopian transfer) and ZIFT (zygote intrafallopian transfer), as well as various forms of so-called surrogacy; some of these approaches may involve cryopreservation (freezing) (Robertson, 1994).

Social values that promote assisted reproduction are many. First, it is widely believed that having children is a natural and normal part of life, and individuals unable to conceive on their own often feel pressure to reproduce anyway; assisted reproduction may thus benefit the infertile. Some techniques (such as AID or egg donation) can also prevent the birth of children at risk of congenital diseases known to be carried by one of the parties who wishes to parent; other approaches, such as surrogacy, can protect women at special risk of harm from pregnancy. Unfortunately, infertility seems to be increasing. Among its causes are environmental pollution, poverty and poor health, sexually transmitted diseases, sterilization, illegal abortions, unnecessary hysterectomies and employment patterns that lead women to delay child-bearing (Warren, 1988). Second, social attitudes are becoming more open to new approaches to reproductive difficulties. Consequently, many people are willing to seek help with reproduction.

General Assessments of Assisted Reproduction

Some people oppose assisted reproduction in principle. This opposition may arise from conservative premises or feminist ones. Let us consider them in turn.

Conservative objections can be traced to two basic facts. One is that assisted reproduction often separates sex and reproduction. The other is that assisted reproduction radically alters traditional assumptions and relationships (Reich, 1978). Resistance to separating sex and reproduction is generally based either on some version of natural law theory or on explicit religious principle, such as the view that non-procreative sex is sinful. Because natural law theory tends either to commit the naturalistic fallacy or beg questions, it cannot provide a strong moral basis for prohibiting the separation of sex and reproduction. Religious principle is, in turn,

an unacceptable basis for social policy in pluralistic societies, although individuals who adhere to the relevant religion are free, other things being equal, to order their lives according to it. Assisted reproduction does alter traditional ways of doing things, but unless one posits the dubious premise that traditional ways are always best, it does not follow that innovations should be rejected wholesale.

Feminist objections can be traced to the fear that assisted reproduction will help men to subjugate women. Feminists emphasize that social pronatalism leads many women to undertake costly and potentially risky procedures to remedy infertility that would not otherwise trouble them. Furthermore, since men still run society, and are especially prominent in science and medicine, women's quest for help with reproduction adds to men's power over them. A few feminists have claimed that if additional techniques, such as ectogenesis or cloning, were perfected, men might seek to eliminate women from society altogether; other developments might also lead to morally objectionable forms of eugenics. Feminists also see assisted reproduction as precluding social reforms that would prevent infertility and provide alternative satisfactions for the infertile (Spallone and Steinberg, 1987). These claims raise genuine concerns that need to be evaluated on an issue by issue basis; however, given the implausible nature of the underlying premise (that men as a group want to subjugate or eliminate women) it would not make sense to reject assisted reproduction in principle on these grounds.

Given that neither conservative nor feminist claims seem sufficient for rejecting assisted reproduction without further argument, let us consider specific types of assisted reproduction.

AID and egg donation

In AID, sperm is obtained from a man who is not the prospective mother's husband, and is placed in her with the aim of initiating conception. AID is widely accepted; it is estimated to produce some 30,000 babies yearly in the United States alone. AID *per se* does not appear to harm the individuals it produces. However, inadequate screening for sexually transmitted diseases like AIDS (acquired immunodeficiency syndrome) or genetic disease is a serious problem that can have catastrophic consequences for the woman or any resulting child. Lack of screening capacity is the principal drawback of do-it-yourself AID. Using a physician's services should in principle guarantee good screening, although this promise may be unmet. However, using a physician to carry out the procedure for AID renders it more costly, and may allow physicians to impose their social values by denying care to single people or lesbian couples. It also opens up the potential for abuses, as when a physician uses his own sperm to initiate a pregnancy without the consent of the woman. AID could theoretically cause marital problems if men are less attached to children who are not genetically related to them. Additional problems that crop up where legal regulation of rights and duties is inadequate are custody claims by donors or demands for financial support by recipients. However AID appears generally to be a beneficial and well-established practice that can make up for male infertility and prevent serious genetic disease (Mahowald, 1992).

Egg donation is more complicated. Whereas sperm for donation is obtained by masturbation, obtaining eggs is unpleasant and risky for the donor. Currently egg donation requires women to be hormonally stimulated to produce multiple eggs; monitoring this development requires frequent blood tests and sonograms. If the stimulation is successful, the eggs are then retrieved from the donor by passing a needle through her vaginal wall. The risks include overstimulation by the hormones, possible damage from the needle and potentially harmful long-term effects of these procedures, including a suspected risk of ovarian cancer (Holmes, 1988). In addition, because the procedure is so new (having started with the development of IVF in the early 1980s) the law in many countries is still murky and provides participants with little protection. Given these risks, it seems doubtful that it is in women's interest to donate eggs, although it does not follow that the practice should be prohibited. In any case, new approaches that avoid the use of hormones by harvesting immature eggs or ovarian tissue will reduce these risks, and the legal situation could be clarified by further regulation.

IVF and its relatives

I will concentrate on the moral issues raised by IVF since most of those raised by GIFT and ZIFT are similar. IVF provides a detour around ill-functioning organs. It requires a woman who desires a child either to undergo egg retrieval or to acquire an egg from a donor. Sperm (usually the husband's sperm) is then introduced to the egg in a Petri dish (Walters and Singer, 1982). To increase fertilization rates, especially where sperm is known to be deficient in some way, a single sperm may be injected through the outer membrane of the egg wall. Any resulting embryos are placed in the woman's uterus when they have grown to four or eight cells; often multiple embryos are introduced to raise the odds in favour of pregnancy. If the woman becomes pregnant, she receives frequent injections of progesterone until the twelve-week point. Women undertaking IVF face an elevated risk of ectopic pregnancy, miscarriage and multiple births. The success rate is low, about 19 per cent for women under 40 and 7 per cent for women over 40, although different clinics have different rates of success, and some versions of IVF (such as that undertaken with egg donation) have better results (*Consumer Reports*, 1996: 50).

One major source of moral concern is the welfare of the offspring of IVF. Some people believe that the right to life begins at conception. Because IVF may lead to the production of 'extra' individuals that may be discarded, such people believe that it is tantamount to murder. As the status of embryos is discussed elsewhere in this volume, there is no need to enter the debate here.

Concern about IVF harming any resulting children is appropriate even if one does not share the view that moral personhood begins at conception. Minor harm might be outweighed by the benefit to the child of existence; more serious ones would raise doubts about the morality of IVF. At present there seems to be some increased risk of damage to IVF babies, and more problems might turn up as they develop (Holmes, 1988: 140). The procedure is still quite new (the first IVF baby, Louise Brown, was born only in 1978) so the long-term evidence of its safety is

scant. Yet more IVF babies are born every year. Perhaps the high rate of unsuccessful pregnancies is weeding out most serious health problems (Robertson, 1994: chapter 5).

Women are also at risk from IVF. If they provide their own eggs, they may be harmed by the retrieval process. If they become pregnant, their pregnancies may fail; ectopic pregnancies are life-threatening if undetected. If their pregnancy fails, they may try again, compounding both psychological and physical risks. Some women seem to feel driven to try again and again, enmeshed in a cycle of hope and despair. IVF can be costly where it is neither included in a national health insurance system nor covered by private insurance plans. Furthermore, successful pregnancies are much more likely than an ordinary pregnancy to end in a Caesarean section, in part because they are regarded as 'precious' and in need of especially close physician management. However, Caesarean deliveries are riskier and more costly than a vaginal delivery. Given these facts, one might question whether women who undertake IVF fully understand its risk/benefit ratio (Sherwin, 1992).

Women's consent might also be questioned on feminist grounds. Pronatalism is pervasive in human societies, as is the attitude that women who do not have children are necessarily unfulfilled, or even worthless. We cannot know how many feel pressured to produce children at any cost, to live up to these standards (Warren, 1988). The onus of barrenness is so great that some women will even undertake IVF when it is their husbands who suffer from a reproductive problem. Although these points suggest that women considering IVF should have lengthy counselling, they do not support a ban on the practice. Doing so 'to protect women against themselves' would treat women as legal incompetents, damaging women more than unwise reproductive treatments.

The risks and costs of IVF have elicited additional objections. Many people are concerned about using scarce resources to create more children when many existing children need good homes; overpopulation is another concern. Both are genuine worries, although they do not, by themselves, show that a legal ban would be appropriate. First, adoption raises moral questions of its own. Adopting babies may contribute to the exploitation of poor young women; interracial adoptions pose special difficulties. Adopting older children with serious problems may require quitting work or virtually abandoning other life projects; while taking on such a project is admirable, it is unfair to expect only the infertile to be responsible for these children while the fertile are morally free to ignore their plight and have any number of genetically related children. It is also true that the human population is outstripping our ability to make sure that people are even minimally provided for. There is evidence that reproduction rates go down when intelligent economic development takes place, but it seems doubtful that such development will occur quickly enough to avoid further famines and plagues. However, because of negative social views of infertile women and inadequate social security programmes that lead to older people's dependence on their children, it would be unfair to expect the infertile to bear the brunt of measures to reduce population growth; nor would this policy reduce population growth by much. It would be much more sensible to

undertake programmes to reduce births that spread the burden more fairly. A related issue is the scarce health-care resources used on IVF at a time when many people lack basic care, either because, as in Britain, their national insurance scheme is underfunded or because, as in the United States, there is no such scheme. However, market forces seem to work strongly against the principle that basic needs should have priority (Purdy, 1996).

Feminists raise additional worries about the overall consequences of having IVF available. Some argue against having the procedure available at all whereas others lament that it is not equally available to all. There is some substance to both these approaches although it is unclear that the remedy is in either case to make IVF unavailable to anybody.

IVF's existence means that the infertile do not have to accept their fate: there is always another procedure to try. Social attitudes towards the infertile, especially women, may thus coerce them into IVF programmes, instead of getting on with their lives. This state of affairs reinforces sexism and pronatalism. The answer to this objection is public debate that alerts women to their options and empowers them to say no to IVF, or to repeated cycles of IVF (Sherwin, 1987). It is true that some technologies, like fetal monitoring, may become part of the standard of care, so that women can hardly refuse them; however, there is no reason to believe that IVF will do so, especially if it is expensive. Some feminists are concerned that IVF could contribute to a slippery slope to a stringent eugenic programme that insists on examining every embryo before implantation. But the objection is then to the eugenic programme. Unfortunately, any innovation that starts out only as an option could be made mandatory by an oppressive state, but that is not sufficient reason to attempt to quell all innovation. A lingering question is why reproductive technologies like IVF continue their steady development. While the extremist worry that men are plotting to replace women with test-tubes seems untenable, the scientific and medical establishment does not have a particularly good record of meeting women's needs. Continued advances in reproductive technology might reinforce the view that women's only legitimate desire is to have children, and that they should be willing undertake any risk to achieve that aim. This possibility is a serious concern that needs thorough public airing.

An additional worry is that the technology, because of its reliance on the scientific and health-care establishments, provides yet another site of discrimination against already disadvantaged groups like single women, poor women and lesbians (Overall, 1993). Some people believe that these women should not be having children and thus cannot have any right to assistance. However, there is no reason to think that they are worse parents than heterosexual couples. This kind of discrimination should be countered by eradicating discrimination, not the service itself.

A further moral concern is that it is often convenient to produce more genetic material than can be used fresh so that genetic materials are now often frozen before use. This practice is disturbing to those who believe it is wrong to manipulate such materials, although it is not clear that their objections are justifiable. A more substantive worry is that such cryopreservation is experimental in humans and the possible long-term risks are unknown. In addition, freezing genetic materials may

exacerbate problems about ownership. For example, the materials belonging to a given person or couple may be given to others, couples may come to disagree about what to do with their materials or materials may be left 'ownerless' because of unexpected deaths (Robertson, 1994: 104–14). These problems can be avoided by contracts that determine the disposition of these materials.

IVF also increases the frequency of multiple pregnancies. These pregnancies can pose serious risk to the fetuses and for the prospective parents if they already have children or if the number of fetuses is more than they think they can handle. Selective abortion of healthy fetuses is considered morally dubious by many (Overall, 1993).

Last but not least, IVF with egg donation opens up the potential for pregnancy in post-menopausal women. This use of IVF has been highly controversial, although it is not clear that it warrants the outcry it has provoked. A realistic worry, however, is the prospect of elderly parents who do not live long enough to rear their children to adulthood. This objection is morally tenable only if similar arguments are used against men fathering children in late middle age and beyond.

Surrogacy

Surrogacy involves impregnating one woman to gestate a baby who is to be raised by another. Friends or relatives may carry babies for each other, or the arrangement may be a commercial one undertaken for pay; most of the controversy revolves about this latter practice.

Given that ordinary surrogacy fertilizes the surrogate's own egg, the term 'surrogacy' suggests bias against the so-called surrogate in favour of the sperm provider. After all, she provides both genetic material and gestation; he provides only genetic material, so why should she be described as a surrogate? It would make sense to use a more accurate and objective term like contract pregnancy. A more complicated form of contract pregnancy, so-called gestational surrogacy, proceeds by implanting a fertilized egg (rather than just sperm) into the woman who will become pregnant. It raises the question whether genetic relationship or gestation bestows motherhood on a woman; however, one might want to argue that neither constitutes motherhood and that child-rearing is what turns women into mothers. This deconstruction of motherhood creates serious tensions, especially for feminists (Stanworth, 1987). Feminists surely want to underline the importance of child-rearing, while not devaluing biological links; however, neither do they want to reduce motherhood to biology.

Simple contract pregnancy is morally problematic; additional concerns about IVF and the deconstruction of motherhood come into play with gestational contract pregnancy. Simple contract pregnancy raises questions about the welfare of the resulting children, about its effect on women, both as individuals and as a disadvantaged group and about the integrity and harmony of families (Mahowald, 1992). It also raises the spectre of heartbreaking legal cases where either too many or not enough people want a given child.

Open and widespread contract pregnancy is a new phenomenon and thus it is

difficult to know what its effect on children might be. The chief concerns are psychological and emotional since there is no reason to think that ordinary contract pregnancy disadvantages children physically. Children might be disturbed to think that they weren't born the usual way, but the more common the practice, the less problematic that would be. Some people believe that the potential for such problems implies that contract pregnancy is wrong. But it is difficult to see why that would be so, given that many of the same people also believe that it is morally permissible to bring new persons to life even when they are at risk of serious disease or disability, since otherwise they would not enjoy any life at all. Also of concern is the effect of contract pregnancy on the woman's already existing children: they may bond with the fetus and then have to watch a sibling being given away. The question is whether it is possible to explain to young children that their mother is so delighted with motherhood that she wants to make it possible for others who could not have children (or healthy children) without her help. If not, would siblings' emotional difficulties constitute sufficient grounds for banning contract pregnancy? The answer must surely depend on some sort of moral cost-benefit analysis, taking into account the often intense unhappiness of the infertile and the desirability of their other goals such as bypassing problematic genetic materials or reducing risk (Purdy, 1996).

One line of argumentation objects to contract pregnancy on the grounds that it involves the commodification of human life, or baby-selling (Radin, 1987). Some proponents of the practice might argue that there is nothing wrong with commodification; others would deny the charge, arguing that what is at issue is the sale of a right to a parental relationship to a child. This latter response would also suffice against the claim of baby-selling.

A more serious problem is raised by those cases where something goes awry and either too many or not enough people want to raise the resulting baby (Alpern, 1992). The notorious Baby M case, where the gestating woman fought to retain custody, raises the spectre of a child torn between conflicting parties. Cases where a baby is deformed or ill raise the possibility that nobody will take responsibility for it. Neither situation is in a child's best interest, and the practice clearly needs to be regulated to eliminate such possibilities.

What about the consequences of contract pregnancy for women? Opponents argue that the practice exploits the women who undertake pregnancy for pay and may coerce the wives of men who engage outside women to carry pregnancies for them. It is also argued, as with IVF, that the practice reinforces undesirable stereotypes of women as breeders and promotes pronatalism; the issues are similar and will not be pursued further here.

The argument that contract pregnancy exploits women rests on a questionable definition of coercion and on a view of women that doubts whether they can be competent to undertake this kind of activity. Coercion is alleged because the women who undertake contract pregnancy for pay are usually poorer than the contracting couple and the standard $10,000 (US) plus expenses is claimed to constitute an irresistible attraction. However, it turns out that it is not usually impoverished women who undertake such pregnancies, but married lower middle-

class or working-class women. Furthermore, although $10,000 is a nice sum, some people argue that it is in fact insufficient compensation for such a major enterprise, considering that the lawyers who help arrange these transactions earn at least as much. The fact that the woman is poorer than the couple is unsurprising, given that the practice is a luxury good, and luxury goods are usually provided by the poor for consumption by the wealthy. Without a fuller critique of capitalism and/or a demonstration that there is something unique about such transactions that makes them illegitimate even in a capitalist context, this allegation fails. The possibility of exploitation seems more plausible in the case of gestational contract pregnancy (Holmes, 1992). First, a contracting couple might be more willing to employ a very poor woman with health problems since the quality of the egg is not at issue; for such women the compensation might indeed be almost irresistible even though pregnancy might seriously harm them. Second, gestational contract pregnancy opens up the possibility of hiring a minority woman who would be unlikely to sue successfully for custody in a racist society, should she change her mind about giving up the baby. None the less, it remains to be shown that the practice could not be regulated to avoid these problems.

Are women incompetent to consent to contract pregnancy? Brokers now try to hire only women who have children, but some object that each pregnancy is different from the last. Thus a woman can never be expected to know how she will react to a new pregnancy. It is hard to judge whether this claim is true, but even if it is, one might want to argue that it makes any pregnancy a morally dubious undertaking, given the possible negative consequences of the failure to bond to the resulting child. Given the long history of belief in women's incompetence, it is important to demand the highest standards of evidence and reasoning for any such claim; it seems dubious here. The moral concern could be taken care of in any case by ensuring that women have a period of grace during which they can decide to keep the child, returning all payments by the contracting individuals.

Some allegations involve possible harm to both individual women and to women as a group. One important issue is the *laissez-faire* environment that subjects women who undertake contract pregnancy to stringent health practices or that requires them to abort the fetus at the behest of the contractors. There is still much controversy about what a pregnant woman owes her fetus, but although it is reasonable to think that morality requires a high standard, enforcing it legally is another matter. Contracts that give control over a woman's body to outsiders are morally suspect and may constitute a first step onto a slippery slope that gives society oppressive social control over their bodies and their lives (Spallone, 1989). Also, some current practices are clearly unfair to women, especially where they deliver a stillborn child and are deprived of some portion of their fee. After all, many workers (among them dry-cleaners and physicians) are fully paid, even where their efforts are unsuccessful. Allowing contract pregnancy to proceed under such conditions seriously harms women and society should seriously consider banning the practice if it cannot protect women from them.

Additional questions about women's welfare are raised if men can engage in contract pregnancy without the consent of their wives (especially since AID gener-

ally requires the consent of the husband). Thus women may be saddled with children they do not want (Overall, 1987). Nor do wives have automatic legal protection of their relationship to children they do want if the marriage fails. These are serious harms to women and raise the possibility that contract pregnancy should be banned unless wives can be protected from these dangers by regulation.

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