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In vitro fertilisation: the major issues

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Authors' abstract

In vitro fertilisation is now an established technique for treating some forms of infertility, yet it remains ethically controversial. New developments, such as embryo donation and embryo freezing, have led to further discussion. We briefly discuss the ethical aspects of IVF, focusing on the issues of resource allocation, the 'unnaturalness' of the procedure, the moral status of the embryo, surrogate motherhood, and restrictions on access to IVF. We argue that, on the whole, IVF is an ethically justifiable method of assisting infertile couples.

In vitro fertilisation - or the 'test-tube baby' technique, as it is more popularly known - is now an established technique for treating certain forms of infertility. Louise Brown, the first baby to be produced by this method, is five years old, and well over a hundred other infants and young children now owe their existence to the technique. Some thirty medical teams are offering IVF in Britain, Australia, the USA and most of Western Europe. The more successful teams - Edwards and Steptoe in Cambridge, Wood, Leeton and Trounson in Melbourne, and the Joneses in Norfolk, Virginia - can now boast of a rate of conception per embryo transfer in excess of 20 per cent, and sometimes as high as 29 per cent. This is similar to the normal rate of conception per monthly cycle in fertile couples desiring a child.

Despite this success in medical terms, IVF remains ethically controversial. Two recent technical breakthroughs have kept it in the public eye. In March 1983 Wood's team announced that it had achieved a pregnancy using an egg donated by another woman, and fertilised with the sperm of an anonymous donor. In other words, neither the pregnant woman, nor her husband, had any genetic relationship to the embryo that began to grow inside her. The pregnancy spontaneously aborted at about ten weeks. The announcement

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drew criticism from the IVF pioneer Patrick Steptoe, who said the Melbourne team appeared to have made a 'hurried decision' in going ahead with this form of embryo transfer. He said the attempt demonstrated the need for ethical guidelines (1).

Even more provocative was the announcement early in May 1983, of the first pregnancy from an embryo that had been frozen and then thawed (2). This technique opens up many possibilities, including the long-term banking of embryos, either for use by the genetic parents, or for transfer to other couples. Because freezing overcomes the need for synchronisation of menstrual cycles, it would simplify both embryo donation (or 'pre-natal adoption' as Wood's team prefers to call it), and surrogate motherhood (or 'rent-a-womb' as some journalists have nicknamed it).

In this essay, which is based on our submission to the Victorian Government Committee of Inquiry into The Social, Ethical and Legal Issues Arising from *In Vitro* Fertilisation, we briefly present our views on some of the major issues in this area. The work is part of a book-length project which we expect to publish early next year.

Funding priorities

A preliminary issue is whether the community ought to devote scarce medical resources to IVF. One argument used by doubters is that we should not spend money on IVF when it is likely that in the future there will be shortages of, for example, dialysis machines and other life-saving therapies, and that even now more lives could be saved by increased expenditure in cardiac and other emergency areas. Proponents of IVF, however, are not suggesting that IVF should take priority over essential life-saving therapy. The appropriate comparison is with other non-life-saving medical services. What is relevant depends on the description and there is always more than one way of describing the same phenomenon. One way of describing IVF is to say it removes a blemish the patient perceives in her physical make-up. Under this description IVF is like cosmetic surgery, funds for which are still available in many cases. Another way of describing IVF is to say it is the removal of a source of anxiety. Funds for psychiatric treatment are not under threat. Pitching it higher,

another description, which many IVF patients would use, is to say it is the removal of a *disability*. So described, IVF has quite a high claim to funding. Of course, one might question the overall allocation of health resources in all areas; but this question is beyond the scope of the present essay.

A further argument used in this respect is that we should not be expending funds on IVF when there are so many Third World orphans waiting for adoption. We see a great difference between the proposition that Western couples should be encouraged to adopt more Third World orphans and the proposition that Third World orphans should be adopted by the one-in-seven infertile Western couples, even if those couples would prefer and could have their own biological children with the aid of available medical technology. Suitable parents for Third World orphans are not necessarily people who have been denied IVF as an inducement to adopt. If a more vigorous adoption programme is a *desideratum*, there are more effective ways of structuring it.

Is IVF natural

Whether a certain practice is natural depends on one's philosophical conception of human nature. Two views can be distinguished which we will call the descriptive view and the teleological view. The descriptive view is that what is natural is what occurs in nature, untouched by human intervention. Thus what is natural is to be deduced from what occurs. On this account IVF is unnatural, but then so is medicine.

The second view, the teleological view, looks to the ends of humankind. The father of modern conservatism, Edmund Burke, said 'Art is man's nature', by which he meant that we were most truly human when exercising our specifically human capacities. By this account, since IVF (and medicine) involve the exercise of human capacities, they are perfectly natural.

There is a further view which holds that it is natural to do as God ordains. But assuming the existence of an ordaining God, there is some difficulty in ascertaining his ordination on so specific a subject as IVF. We cannot assume that the natural is only what God has permitted in the past, or else every innovation in history would have to be dismissed as unnatural. The alternative to deduction by observation is revelation. The difficulty here is that those upon whom God could most reasonably be expected to have vouchsafed revelation do not all seem to be in possession of the same information.

The view of human nature which we hold is the teleological view; accordingly we see no point in criticism of IVF on the grounds that it is unnatural.

Use of fertilised eggs

If more eggs are fertilised than are implanted the surplus must either be discarded or frozen. An outspoken minority consider that discarding a fertilised human egg is tantamount to murder. For reasons to be

given shortly, we think this view is incorrect and regard the 1, 2, 4, 8, 16 or 32-cell zygote as not in the same category as a developed human being. However, it is not necessary to argue this point yet. If public policy can proceed satisfactorily without offending people's deep convictions then perhaps it should. This leaves the alternatives of freezing surplus genetic material or fertilising no more than will be implanted. The disadvantages of the latter course are: (a) A small proportion of women suffer bleeding at the time of operation, making implantation of the fertilised ovum impossible. If freezing of embryos was not permitted these women would have to undergo another laparoscopy. (b) If embryos are frozen a patient can have them stored for a second (or third) pregnancy later: otherwise she will have to undergo a further laparoscopy each time she wishes to conceive. The later laparoscopies may not produce genetic material as satisfactory as the first, and the patient would be subjected to avoidable risk (though minimal) and some unpleasantness.

Whether this *prima facie* case for freezing should be made absolute depends on how one weighs the following problems associated with freezing.

- (a) If surplus embryos are frozen with a view to later implantation it may come to pass that (for any number of reasons) the biological parents do not wish to proceed. The question of what should be done with the frozen material then arises.
- (b) If fertilised embryos are frozen there may be cases where a couple who are both infertile may wish to obtain the frozen genetic material to bring up as their own child. Objections to this on the grounds that it would be unnatural would, however, be no different from such objections to the process of IVF itself. The procedure has, in fact, certain similarities to adoption.
- (c) If embryos are frozen, and the biological parents do not wish to use the frozen material at a future stage for the purposes of generation, should the medical practitioners, in legal possession of the material, be permitted to use it for other purposes in medical research and treatment?

At this point we can no longer waive our arguments concerning the nature of the human embryo.

The internationally recognised criterion for the permissibility of transplants of non-regenerative and unpaired body parts is brain death. Total brain death, the absence of brain functions, indicates that tissue transplant is permissible. If the medical profession (and indeed the Churches) recognise, as they do, a body's lack of a functional brain as a sufficient condition for utilising transplantable material, then this condition is clearly met by the early embryo. That is to say that the medical profession's own criterion, logically applied, should legitimate the surgical use of fetal material up to the point of brain development.

Of course, it may be objected that a brain dead individual does not have the potential to have a functional

brain, whereas an early embryo does. But so do the egg and sperm, yet nobody feels guilt about failing to bring them together (3).

On this matter there is another important point to notice. The moral status of the embryo is no doubt the most fundamental philosophical issue raised by IVF. It may well prove impossible to reach unanimity on this issue. Where such difficulties prevent the resolution of an issue, there are grounds for allowing some weight to the views held, explicitly or implicitly, in the community at large. We would therefore point out that certain practices, widely accepted in our community, can only be accepted if one takes the view that the embryo lacks the status of a person. Therapeutic abortion is the most obvious example. Controversial as it is, it would seem that there is majority support for its continuance. But in any case, the same view is implied by the use of IUDs for preventing pregnancy. These devices do not stop the sperm from fertilising the egg; they work by preventing the implantation of the embryo. Their use by millions of women is scarcely controversial; yet they must be responsible for the loss of huge numbers of embryos every month. To prohibit the use of early embryonic material because it leads to the destruction of the early embryo would imply that the prohibition of IUDs should also be given serious consideration. If this latter suggestion is deemed absurd or indicative of a disregard of community views, then there is a strong argument against prohibiting, on these grounds, the use of early embryonic material.

Surrogate motherhood

In the context of IVF, a surrogate mother is one who undertakes the gestation of biological material no part of which was produced by herself.

The very concept of surrogate motherhood might be objected to on the grounds that it is not natural. In this respect the same considerations as those rehearsed above apply here.

We see the main problem concerning surrogate motherhood as being whether it should be permitted as a commercial venture. Assuming that A+B had a surrogate motherhood contract with C, the following things could go wrong.

- (1) C could decide that she wished, within the law, to terminate the pregnancy.
- (2) C might have contracted to refrain from smoking, or from taking drugs or alcohol, but may breach the contract.
- (3) C might decide, once the baby is born, that she wishes to keep it.

In normal cases of breach of contract, courts offer one of two remedies. One is called specific performance, which means compelling the defaulting party to perform her contractual undertakings. The other is to award damages, which involves a monetary payment by the defaulting party.

If legally binding surrogacy contracts were permitted, the courts would have to enforce one of the above remedies when things went wrong. But it is likely that contractual surrogates would be drawn from low income groups and employed by members of high income groups. Hence in many cases an award of damages would be ineffectual at best, and at worst unsatisfying to the employers and ruinous for the defaulting surrogate.

If this were so, alternatives would be either to compel specific performance or else to admit that such contracts are unenforceable anyway. But the compulsion involved would be of a singularly odious form. The contract is not like an ordinary contract for services since its fulfilment involves physical invasion of the contractor's body. The surrogate could not, like any other contractor, walk out of the work place, since she would be the work place.

These problems would not arise if a market in surrogate motherhood were prohibited and only volunteers were permitted to perform the service. (This would not preclude the payment of a gratuity such as is offered to sperm donors in Artificial Insemination by Donor (AID)). The question is whether volunteers would be available. Whether they would, would be established by the event. However, the opportunity for altruism does exist, and the advantages of utilising altruism if it is available do not need to be argued.

A further point is that a child born of a volunteer surrogate mother might well feel rationally or irrationally, that it was more loved than one borne for profit. Conversely a volunteer surrogate who performed her role out of love - whether it be to help a friend in need or whether it be some more distant form of altruism - would be less likely to suffer violence to her emotions than one who made a profession of dissociating gestation from nurture.

Finally the possibility of economic exploitation is too obvious to require much comment. Capacity to employ a surrogate might become the hallmark of the idle rich, with the surrogate ousting the butler or the housemaid as a status symbol. This might be defended on the grounds that it provides employment, but there are less exacting ways of effecting income redistribution.

In response to these objections it might be argued that lack of legal enforcement of surrogacy agreements would leave the genetic parents inadequately protected. But if altruism were the surrogate's motive, no better protection for the genetic parents could be devised. Of course, if people insisted, without protection of law, on entering into surrogacy agreements with payment as an inducement, they would be open to science-fiction-style fraud (the surrogate takes the money and the genetic material and runs - first to an abortionist). However, the price of providing the usual form of legal protection for such people is far too high.

Should there not be sufficient volunteers to meet the demand for surrogate mothers, it may be necessary to consider the possibility of state regulation of surrogacy. Regulation would, in our view, be preferable to a

free market. The regulations governing adoption in some countries might serve as a model. Just as private adoptions are illegal, so private surrogacy agreements would be illegal. A surrogacy board could screen both potential surrogate mothers and potential adoptive couples, and set a fee at a level regarded as fair to all parties. In this manner the surrogate mother would be protected against exploitation, and the adoptive couple against extortionate demands from surrogates threatening to abort or keep the wanted baby. Even in this situation we do not believe that a surrogate motherhood contract should be enforced against a surrogate who wished to keep the baby; but an expert screening panel might, with practice, be able to make such occurrences very rare.

Access to IVF

As pointed out above, IVF has many analogies with a number of other non-life-saving therapies. It is widely recognised that medical treatment should be available to all those in need of it, irrespective of social class or means. IVF should not therefore be treated differently. 'Need' for IVF can be established by the strength of the patients' desire for children. It can reasonably be assumed that anyone prepared to go through the daunting experience of the fertility tests, multiple examinations, counselling and laparoscopy involved in IVF is someone whose desire for a child is very great indeed.

The question then arises whether IVF should be available only to married couples, or whether it should be available also to unmarried couples or to individuals of whatever private inclinations. To restrict this treatment to married couples would be a precedent, since no other medical treatment is legally restricted to only a sub-class of those who need it (need here being demonstrated by willingness to go through a gruelling regimen).

Presumably the argument for restricting IVF to married couples is that the children should go to a good home. But different people have different views as to what constitutes a good home. Presumably, should persons other than married couples seek IVF they would be doing it with a child in mind and with every intention of furnishing it with what they would regard

as a good home. Certainly whatever anyone else thought of such persons' sexual mores, they would not be going through IVF for fun.

The crucial point here is whether the State should restrict IVF availability to married couples. However useful empirical research may be in producing generalisations about whether married couples, on the whole, provide children with a better home environment, these generalisations will never show that *particular* IVF patients would not provide children with a good home. That needs to be judged *on all the facts of the particular case*. The State should not impose a blanket prohibition, but allow each case to be judged on its own merits.

A further point against a blanket prohibition, based on an appeal to justice: society does not seek to prevent any fertile persons, whatever their marital status or private sexual predilection, from reproducing. Nor so far as couples who conform to conventional ideas about marriage are concerned, does it put a restriction upon the provision of services that enable otherwise infertile couples to reproduce. It would be unjust if a particular self-defining group, whose members were identical (except in respect of certain attitudes) to others receiving IVF treatment, were made the object of a restriction against the provision of such treatment to them.

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References and notes

- (1) Trounson A, Leeton J, Besanko M, Wood C, Conti A. Pregnancy established in an infertile patient after transfer of a donated embryo fertilised *in vitro*. *British medical journal* 1983; 286, Mar 12: 835-839 and subsequent correspondence.
- (2) *The Age* (Melbourne) 1983 May 3.
- (3) For further development of this argument see Kuhse H, Singer P. The moral status of the embryo. In: Walters W, Singer P. eds. *Test-tube babies*. Melbourne: Oxford University Press, 1982: 57-63.