

The Human Fertilisation and Embryology Bill

A sermon preached by the Revd Dr Mark Butchers on Sunday 6th April 2008 (the 3rd Sunday of Easter) at St Peter's Wolvercote.

One debate that has been in the news recently, and is likely to continue to be, is the Human Fertilisation and Embryology Bill. Cardinal Keith O'Brien has described it as a "monstrous attack on human rights". Gordon Brown has supposedly faced resignation threats from Roman Catholic ministers, if they're not allowed a free vote on it. Various Anglican Bishops, including the Bishop of Durham have expressed concerns; others have expressed support. What are we to make of it all? And how can we get our heads round the complex issues involved? Or should we leave that to the experts?

The questions are indeed enormously complex. Let me just give you a flavour, though not being an expert in any field of science, those of you who are, will need to bear with me. I'm just going to pose some of the questions which have been addressed in the past or are being addressed now.

Is it right that "spare" embryos created to help couples who are having problems conceiving, but which aren't implanted in the womb – is it right that those "spare" embryos should be used for research purposes with the permission of the parents up to 14 days old? The law currently says yes, and the Church of England supports that.

Is it right that embryos should be specially created for research purposes up to 14 days old? The law currently says yes, but the Church of England does not support that.

Is it right to take a cell from an adult, remove its nucleus containing all of that person's DNA and implant it in a human egg? This is cloning for research purposes. The law currently says yes, as long as the resulting embryo is destroyed before 14 days old and never implanted in the womb. The Church of England supports that.

These questions have been around for a while, and there is legislation in place to deal with them. But there are new questions which the new Bill is trying to address. I haven't read the Bill, but my understanding is that these are the hot questions:

Is it right to take a cell from an adult and remove its nucleus and DNA, but instead of implanting it in a human egg, implant it in an animal egg? The result is a cytoplasmic hybrid embryo – or cybrid – and it too would be used for research only up to 14 days. The Church of England's is advising yes, but under strict conditions and for a limited time only (say 5 years), in the hope that this might lead to the possibility of new treatments for currently untreatable conditions.

Is it right to fertilise a human egg with animal sperm or vice versa, again for research purposes up to 14 days? The result is a hybrid embryo. The Church of England is advising no.

Is it right to merge human and animal embryos for research purposes up to 14 days? This is called a chimera embryo. The Church of England is saying yes, but only on a case by case basis.

Confused? Dazed? I'm not surprised.

The new questions which the new Bill is trying to address arise because of advances in scientific techniques. We can do things now we couldn't do five years ago. It's a fast moving field and the ethical questions keep piling up. It's important to understand the context and motivation for developing these new techniques. Sometimes there's a tendency to think that scientists are exploring these new areas simply for the sake of it - rather like the reply of the mountaineer asked why he climbed mountains: "because they're there". Similarly scientists can be thought to be exploring these cutting edge areas simply because of a quest for knowledge or to advance their careers. This is unfair. There is a hugely important, noble aim underlying this new research: namely to understand how all the different organs, limbs and cells in the human body develop from the same original stem cells. Because if we can understand that, it might be possible to grow healthy liver cells to transplant to combat liver disease or healthy neural cells to transplant to treat Parkinsons or Alzheimers. There is a golden prize in view – treating what is currently untreatable - and that's what spurs scientists on; and I don't suppose anyone would deny this was an ethically good goal.

The question though is whether the cost is too high. Christians have always maintained that the end cannot justify the means. So we have to ask whether the use of embryos, of whatever form, for research up to 14 days old is justifiable or not. Two things make this difficult to do. First the complexity of the issues, not just the scientific ones, but the theological and ethical ones as well. And secondly, what has been called the "yuk" factor – in other words our instinctive reaction against the mere idea of a human nucleus being inserted in an animal cell, or against cloning, or simply about interfering with natural processes at all. We're very quick to react in this way, and that can be a barrier to taking a good look at the facts and making a reasoned decision.

As Christians, we have to take account of key ideas from the Bible and Christian tradition. From the Bible, we can draw ideas about the sacredness of human life; the uniqueness of human life – made in God's image; the fact that we are known by God even in our mother's womb: "before I formed you in the womb I knew you, and before you were born I consecrated you" (Jeremiah 1.5).

From the Christian tradition, the teachings handed down to us, we can take insights about when human life is thought to begin. For instance, in the first few centuries of the Church, theologians discussed punishments for aborting a foetus. Some like Augustine drew a distinction between when a foetus was unformed and when it was formed (i.e. recognisably human). To abort an unformed foetus carried a lesser penalty than aborting a formed foetus. Other theologians such as Basil drew no such distinction. But certainly from the 11th century, canon law in the Western Church recognised the development of an embryo from an unformed state into a formed foetus. And Thomas Aquinas famously argued that ensoulment (hence becoming human) takes place at a particular point: 40 days for a male foetus, 90 days for a female. Before that the foetus was presumably only thought of as potentially human.

But then things moved on to where they are today. In 1869 Pope Pius IX abolished the distinction between penalties for early and late abortions. From then on, certainly in the Roman Catholic Church, conception was deemed to be the key moment when human life began. Pope John Paul II reaffirmed this in his Encyclical *Evangelium Vitae*: “from the time that the ovum is fertilized, a human life is begun.” And for many Christians, Roman Catholic or not, that is the bedrock of their thinking on these issues. Human life begins with conception, so any research on any embryo, whatever age, is deemed wrong, because it is research on a human being without their consent.

But this is not the view of all Christians. Sometimes we have “Road to Emmaus” experiences, when someone comes alongside us and sheds new light on a topic in a way which totally transforms the way we think about it. Sometimes the person comes alongside us through their writings. Sometimes it is more than one person. I had such an experience in relation to embryo research at theological college. Up until that moment, my views were conditioned by the “yuk” factor and by the belief that we have to see the moment of conception as the start of human life. But that all changed.

To explain why and how, I need to describe briefly what happens from conception onwards. When the sperm penetrates the egg, a human embryo is created. Cells begin to divide and multiply, and by the fourth day the cells which all started from one and the same original cell form into two different types of cell – an outer layer which becomes the placenta and umbilical cord, and an inner cell mass, which has the potential to become the foetus. Over the first 14 days, the fertilised egg travels to the womb where it may implant itself. It may split in two during those 14 days to form identical twins. And it is soon after those 14 days that what is called the primitive streak appears. Thereafter it is a unique individual, growing to form a foetus and ultimately a fully formed human being.

When I was learning about all this at theological college, one key fact hit me between the eyes – my Emmaus Road experience. This was the fact that 70% of fertilised eggs never implant themselves in the womb, but are simply lost. 70%.

70% are flushed away with the next menstrual flow. It's a huge proportion. And the effect it had on me was to question my previous assumption that human life starts with conception. Because if it does, then the vast majority of the human race are lost with the next menstrual flow, before they are a few weeks old. I found it difficult to accord the status of human life to all these lost fertilised eggs.

So I had to find a different point for the start of recognisably human life. The moment of conception was too soon. It had to be later with implantation in the womb and the emergence of the primitive streak i.e. not before 14 days. I found myself agreeing with those who said that before that point the embryo has the potential to become a human being, but is not yet human.

This of course has knock on consequences for the debate about embryo research and the Bill coming before Parliament. If we view conception as the start of human life, research on embryos without their consent (and of course they can't give that) is ethically wrong. But if we say that human life begins later, after 14 days, then maybe it is ethical.

Let me quote from a 2007 briefing paper prepared by the Church of England's Mission and Public Affairs Council, as it sums up the latter view well:

Christians who hold that the legislation is largely correct will regard the early embryo as having developmental status. This stance accords the embryo a profound moral respect on the basis of its potential to develop into a human being, but it sees that ethical status of human personhood as being something that develops with increasing complexity of being. The stance is based on the fact that there is no clear continuity of individual identity from fertilisation to the fetus in the womb. The undifferentiated cells of the fertilised egg in its first few days form not only the fetus but also the placenta and umbilical cord. Furthermore embryos can divide to form identical twins. Seventy percent of them will be washed away.... With the formation of the primitive streak [however,] there is the basis of the nervous system and all that makes for a particular individual. From that point it is possible to say that there is a continuity of identity with the later child and adult and therefore it is right to talk about an individual human being. Before that there is only the potential for an individual human life.... [Such a] developmental view of human personhood has not historically been absent from Christian thinking.... Those who take a developmental point of view may incline to take a less cautious stance in relation to practices which might yield obvious benefits to the infertile, those suffering from debilitating illnesses and to scientific research generally. In contrast to earlier Christian views concerned mainly with gradations of wrong on procuring or performing abortions, modern debate about the morality of embryo research has to take into consideration the enormous potential good to which this research could lead.

(Embryo Research: some Christian Perspectives, paras 48-51)

Embryo research is not something to be done lightly, certainly not simply for the sake of it or to advance careers; it requires a noble purpose, such as new treatments for untreatable diseases. Nor is it something to be done without stringent legislation, good monitoring and regular review. Even with those safeguards, not all Christians will be able to accept it, I know. Some will believe that even if embryos up to 14 days are not yet human, they are still potentially human, and that is sufficient to rule out research upon them. But other Christians will be able to countenance it.

One final thought. All of us have benefited and will benefit from medical research, some of which has been controversial in its time. I owe my existence to scientists who developed the use of pig and cow insulin to treat diabetes. At the age of 28, my father developed Type one diabetes. He was lucky to have been born after 1923 or he wouldn't have survived, and I wouldn't be here. The fact that all of us benefit from such research is not an argument for anything goes; the end doesn't justify the means. But it is perhaps a good reason not to let the "yuk" factor rule our thinking on these difficult issues. We need to dig deeper than our instinctive reactions to explore the issues as fully as we can.

Amen.