

The ethics of research on embryos

Michael Cook

Australasian Bioethics Information

An address to the Ballarat Section of the Women's Section of the Liberal Party,
19 September 2002

Is Parliament wasting its time?

We may be here tonight with different views on the ethics of embryo research. But the simple fact that you are here shows that we can agree on at least one point: that the destruction of embryos, even for noble humanitarian motives, like medical research, is a crucially important ethical issue. It's not a no-brainer.

What is the main issue in this debate?

This is an ethical debate.

It's not a debate about opening up new industries for Victoria. It's not a debate about jobs for brilliant young scientists. It's not a debate about Australia's scientific reputation. And we would be making an awful blunder if we reduced it to a debate about the effectiveness of adult stem cells versus embryonic stem cells.

It is an ethical debate because we are talking about persons and their rights, about the equality of human dignity. Much is at stake. We are shaping the future of what it means to be a human being in Australia.

We cannot blindly follow the path of expedience, of tailoring our understanding of human dignity to financial and technological success. Australia has always regretted doing the expedient thing rather than the right thing. Just remember how we shamefully betrayed the East Timorese in 1975. We redeemed ourselves 25 years later – but in that time, it is said that some 200,000 people perished.

Why is a debate about embryos important?

There are many reasons. Let me highlight two of them.

First, fundamentally the debate over embryonic stem cell research is about what a human person is, what rights a person has and what respect society owes that person. When people cannot agree on so fundamental an issue, terrible things can happen.

For instance: nearly 500 years ago, Europeans discovered dark-skinned bipeds living in Africa and North and South America. They made the wrong decision: they chose slavery. As a result millions of Africans perished on slave ships and were treated like animals by their owners. Indians were worked to death in mines and plantations. We are still paying the price for that mistake.

Second, this is an ageing society about to confront many uncomfortable ethical dilemmas about vulnerable and unwanted people. This is the first major debate over whether health, and not human rights, is the highest ethical standard. It will not be the last. What Parliament decides now about embryos sets a precedent for all subsequent legislation. It writes the rulebook for future debates about health.

The voice of science

The role of scientists is to give us the facts. From an ethical perspective, they have done a great job in establishing a consensus on embryos – indeed, all the facts we need to make an informed ethical judgment:

- embryos have a fully human genetic toolkit
- given the right conditions, an embryo will grow into a baby
- embryos are very small, smaller than a full stop
- embryos are vulnerable and cannot survive without a favourable environment
- the frozen embryos are unwanted and spare

However, the expertise of scientists is what *can* be done, not what *should* be done. American engineers and scientists make whiz-bang bombs and cruise missiles. It doesn't follow that they are experts on whether Bagdad ought to be bombed.

So, when scientists talk about what should be done with embryos, listen politely. Their contribution to a political and ethical debate is invaluable. But, like everyone else, they have their own prejudices and biases. Almost every scientist involved in biotechnology has a financial stake in his or her research.

People in the stem cell game are businessmen. Exaggeration and hype are part of that game. When you're buying a used car, you don't listen much to the salesman -- you kick the tyres. You should do the same when you listen to Professor Trounson.

The crux of the issue: what makes us a person?

If the embryo is a human person, it has human rights, no matter how big it is or what it looks like. No person can be experimented on against his or her will. No person can be dissected for profit. This is a fundamental principle of a democratic society..

What does science tell us about the embryo's humanity?

At least until recently, when it was realised that embryos might be money-spinners, embryology textbooks agreed that it was a human being. Let me cite just one, a 1997 American standard text, *Human Embryology*, by William J. Larsen: "We begin our description of the developing human with the formation and differentiation of the male and female sex cells or gametes, which will unite at fertilization to initiate the embryonic development of a new individual."

The consensus of embryologists is that an embryo is a human being which has commenced a smooth, continuous, uninterrupted development which is not completed, physically, until the age of about 25¹.

In any case, if the embryo is not human, what is it? A flamingo? an orang-utan? a goldfish? It must be something. In fact, the only reason the embryo is useful is

¹ Irving, p 12. Moore.

precisely because it is human. Even Professor Trounson has admitted that it is human -- “clearly human”, he said in a recent *Lateline*.²

But is the human embryo a human person?

But can you argue that an unwanted embryo is a human being, but not a human person? Some people do, notoriously Professor Peter Singer, who also says that pigs have more dignity than a mentally handicapped child. Let's examine these objections briefly.

Their size

“The embryo is smaller than a full stop. How can it have rights?” Obviously human dignity isn't proportionate to human size, or Michael Jordan would be more human than you or me. What we're really arguing is that a one-hour-old embryo doesn't look like you or me. True, but it looks just like what a one-hour-old human being ought to look like. Baby photos of your grandparents look nothing like they do now. But they are still the same person.

The best-known explanation of the origin of the universe is the Big Bang Theory. In the beginning, it says, the whole universe was smaller than a full stop – smaller than an embryo. So much for the moral significance of size.

Their blobby-ness

According to the embryology textbooks, the idea that the embryos is just a blob of cells is hokum. The embryo is a new human being which directs his or her own further growth and development. It is a highly organised, genetically unique, live human individual.

Their high mortality rates

“A high percentage of embryos are aborted spontaneously. How could such vast numbers of nearly invisible cells be regarded as persons?” is another objection. It is true that many embryos die prematurely-- but this does not authorise us to deliberately kill embryos. I recently read that the infant mortality rate in Afghanistan is nearly 50 times higher than in the United States. Does that mean that Afghan infants are less deserving of human rights than American infants?

Their status as “unwanted”

“These embryos are unwanted.” is constantly repeated. Does this make them less human? What is the implication of this? That we only have human rights if we are wanted? That being surplus to someone else's plans writes you out of the human race?

Test out this principle on the residents of nursing homes in Ballarat. How about the millions of AIDS orphans in Africa? In fact, the very people whom we are trying to cure may some day be deemed unwanted because they have defective genes or because they are handicapped. What then?

² Trounson and Van Gent, *Lateline* debate, 14/8/2002, “TONY JONES: Alan Trounson, is it the smallest member of the human family, the embryo? PROFESSOR ALAN TROUNSON: It' s clearly human. We treat it with respect, but we have laws which say that we have to destroy it.

Their lack of self-awareness

“The embryo is unconscious and has no emotions.” is another argument. I grant this, but potentially it does have self-awareness. Within nine months at the most, it will have emotions and consciousness.

The problem with this argument -- which is a favourite of Peter Singer’s disciples -- is that it can easily be applied to you and me as well. If we say that an embryo is not a person because it is not fully conscious, we must also admit that you and I lose some of our personhood when we become senile or comatose.

The end result of this is a sliding scale of humanity with a tick list of characteristics which define humanity. Who ticks those boxes? Who sets the criteria?

Cures for dread diseases

To my mind, the debate ought to come to an abrupt halt once we have agreed that an embryo is a human being. It is wrong to kill human beings. The first principle of ethics is that we must do what is right and shun what is wrong.

Unfortunately, many people are arguing that the end justifies the means and that we should kill the embryos anyway because of the immense therapeutic benefits of their stem cells. It’s Lenin’s justification for the cruelties of Marxism: You can’t make an omelette without breaking eggs.

I don’t agree with this. But, just as a matter of interest, will the omelette be edible? Who will eat it?

Where are the cures?

We hear a lot about the potential for cures for Parkinson’s disease and Alzheimer’s diseases from embryonic stem cells. But let’s take a reality check. “After more than twenty years of unrestricted research on animal embryonic stem cells, this field has failed to yield a single cure for any human illness.”³ It is tragic to see one-time Superman Christopher Reeves consumed by his hope that embryonic stem cells will help him to walk again. He has been duped.

I don’t want to turn a talk on the ethics of stem cell research into a technical debate between the merits of embryonic stem cells versus adult stem cells. But I do want to point out that only adult stem cells have runs on the board at the moment. Since the agreement reached by the Premiers and the Prime Minister which gave rise to the bill under debate, there have been reports of improvement in the following conditions: "bubble boy" immune deficiency, Parkinson' s disease, heart disease, multiple sclerosis, spinal injury, bone marrow disease...

Don’t take my word for it. Here is a paragraph from a recent open letter to Parliament from a number of eminent Australian scientists:

“The community has not been properly informed of the scientific difficulties involved in developing embryonic stem cell therapies, which include major obstacles of immune rejection and cancer formation. Research using adult stem cells, by contrast, avoids issues of rejection and cancer formation, and has the

³ Maureen Condic, “Stem Cells and False Hopes”, *First Things*, August/September 2002, pp 21-22.

clear advantage of being able to use the patient's own cells to repair any deficits.”

Who will benefit from embryonic stem cell research?

I interviewed a number of biotechnology investors for *The Australian* recently. They all told me that the embryonic stem cell business was a highly risky investment. Cures were not even on their radar screen -- they were perhaps 15 years over the horizon. What did excite them, however, was the very real possibility of using ESCs to test drugs. Embryonic stem cells can shorten the long and expensive lead time required to bring drugs on the market. So, whether or not they cure Christopher Reeve, they will line the pockets of multinational drug companies. But I don't think that this is a good enough reason to smother our ethical misgivings and kill them.

Is embryo research really altruistic?

It is argued that even if embryos are persons, destroying them for research will avert deaths through tragic illnesses. Well, I'm sceptical about this altruism. If investors genuinely wanted to save lives, they would be investing in cures for diseases which kill millions of children every year.⁴

Sleeping sickness, which kills thousands in Africa each year, is a good example of our self-centred approach to medical research. Melarsoprol, which was developed over 50 years ago, can cure the disease. But it kills up to 10% of the people who take it. A more effective and less toxic drug, Eflornithine, exists but the manufacturer stopped production in 1995 because it was unprofitable. However, production lines started rolling again five years later when it was found to remove women' s unwanted facial hair.

Let's not kid ourselves. Cash, not compassion, is the driving force behind embryonic stem cell research. Don't get me wrong -- there's nothing wrong with making a quid. But not at the expense of human lives.

“But the embryos are going to die anyway”

To me, this is the saddest of sad reasons for killing embryos. In no other ethical issue do Australians reason like this -- unlike in China, where this is government policy. Prisoners on death row are going to die anyway, so the government makes the most of them. As an executed prisoner drops to the floor, doctors are cutting him open for his kidneys, his corneas and his skin. It's a big business for transplant surgeons. And they execute more prisoners than any other country.

I don't want Australia to turn into that sort of society.

Corrupting arguments

The “They're going to die anyway” argument is like Frodo's ring in *The Lord of the Rings*. It empowers its owner and it corrupts him. Nazi doctors in Auschwitz could excuse their bizarre experiments on prisoners because they were going to die anyway.

⁴ 11 million children in developing nations die before the age of 5. About 70% are killed by diarrheal diseases, malaria, respiratory infections, measles or malnutrition. Every year, about 8.8 million people get TB and 1.7 million die. Malaria kills one million a year, mostly African children.

More relevant to Australia, however, is an experiment which only ended in the 1970s. It happened in the United States. For 40 years, officials of the US Public Health Service used impoverished, uneducated black men in Alabama in a project to test the effects of untreated syphilis. Even after the discovery of penicillin they were left untreated. And this was the doctors' excuse: even if the experiment stopped, these poor blacks couldn't afford treatment with penicillin. So the experiment continued. The store of medical knowledge increased. The men died an awful death.

Nearly any experiment on the sick and disadvantaged can be justified if we accept this line of reasoning.

Yes, these embryos are going to die. But it is one thing to see them die and quite another to profit from it. IVF doctors are telling us that we can choose between flushing them down the toilet or using them as spare parts. I have another idea.

Am Spiegelgrund

Let me share with you a story that touched me deeply. During World War II, a Nazi doctor in Vienna killed children. He dissected them and carefully stored their brains in formaldehyde. After the War, he became a famous neurologist who published many learned scientific studies on brain deformations. He based his work mainly on the brains of his victims.

Finally the news of this obscenity reached the public. The jars were removed from the anatomy museum. The doctor was put on trial. The government tried to return those body parts to surviving relatives. Earlier this year, there was a public burial attended by thousands of people of all ages -- not for the children, but for the body parts.

It was a sign of respect for these poor youngsters who had been, quite literally, butchered to satisfy an unscrupulous scientist's curiosity.

Perhaps these frozen embryos will die anyway. But when they do, we can bury them. We have the technology. We ought to have the respect. We ought to have the decency.

Who is really at risk?

What I am arguing is that "law and public policy should proceed on the basis of full moral respect for human beings irrespective of age, size, stage of development, or condition of dependency"⁵

What we must not create in Australia is a sliding scale of humanity, with some persons having more rights than others. We have repudiated this before, in the cases of Aborigines and women. We must repudiate it again for embryos.

In fact, it is in our own best interest.

If we don't grant respect to persons at the very beginning of their journey through life, it is ourselves whom we are putting at risk. Every reason which excuses the destruction of embryonic persons is a bullet which can be fired some day at you, or your children, when you become vulnerable, helpless and unwanted.

⁵ Robert P. George, 3.

