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PROHIBITION OF HUMAN CLONING BILL REGULATION OF RESEARCH INVOLVING HUMAN EMBRYOS AND ASSISTED REPRODUCTIVE TECHNOLOGY BILL

Dr WATSON (Moggill—Lib) (6.00 p.m.): I rise to speak on the Research Involving Human Embryos and Prohibition of Human Cloning Bill 2003 and of course the split bills that were tabled earlier today by the Leader of the House. The split bills necessarily cover two related but fundamentally different areas. Firstly, the Prohibition of Human Cloning Bill 2003 bans human cloning and a range of other ethically unacceptable practices. The second bill, the Regulation of Research Involving Human Assisted Embryos and Assisted Reproductive Technology Bill 2003, establishes a comprehensive regulatory system to govern the use of excess IVF embryos and permits scientists to undertake work on excess IVF embryos that otherwise would have been destroyed by following some specific procedures and strict criteria. I recognise that the member for Kurwongbah made a very good point when she said that the real debate on this occurred in the federal parliament last year. The debate here is about filling in the voids and making sure there is a consistent regulatory system in Queensland.

Mrs Edmond: Without this, there won't be.

Dr WATSON: Yes. I think those are fairly pertinent points for anyone thinking about voting on this bill. So like all members here, I support the banning of human cloning and the other questionable practices such as the creation of hybrid embryos. However, it is the second bill which has exercised the minds of most members. It is to that bill which I will briefly attend. Without pretending to be comprehensive, the questions I had to resolve in my mind were the main arguments being put forward against allowing embryonic stem cell research. To this end I should acknowledge the earlier contribution of the member for Indooroopilly who helped organise a session here at Parliament House, which I attended.

As I understand the issues, there are four main arguments against allowing embryonic stem cell research. Firstly, there are many in our society who believe that all human life is sacred and that human embryos, no matter at what stage of development, represent human life. As such, use of them for any experiments or research would be unethical and immoral. According to this argument, good ends such as health do not justify the means of killing embryos.

A second argument is that even though the excess IVF embryos currently in existence will be destroyed anyway, there is an argument they were originally created for a certain purpose, such as the creation of life, and it would be still immoral and unethical to use them for any other purpose such as medical research. Thirdly, there is a fear among some sections of the community that allowing further research on embryo stem cells represents the thin edge of the wedge and puts us on a slippery slope towards more future experimentation of even more unethically questionable character.

Fourthly, many experts believe that the use of embryo stem cells is unnecessary as the research involving adult stem cells has in fact been far more promising in curing various diseases. Of course, the use of stem cells taken from consenting adults does not promote the same kind of ethical dilemmas as the embryonic stem cell research. Those experts claim that proponents of embryonic stem cell research tend to overestimate their case, whereas in reality the embryo stem cells are more difficult to work with, have had only limited successes in animal experiments and have led only to a few successful clinical treatments in humans. It is also argued that in many instances the use of patient's own cells is preferable as it overcomes the problem of the body rejecting foreign cells.

The arguments in favour of embryonic stem cells I guess are far more straightforward in the sense they do not actually pose the same kind of ethical dilemmas. These are simply those. Embryonic stem cells are considered by many experts to offer the most promising platform from which to develop cellular therapies because they can form all of the 220 cell types in the body and can proliferate indefinitely to provide an unlimited amount of starting material for the production of specific cell-based products.

Secondly, each year thousands of excess fertilised eggs are destroyed because they are no longer required by the families participating in the IVF treatment. The bill proposes that only those excess fertilised cells currently in existence be permitted for stem cell research. In addition, this could only be done with the permission of each individual to provide the egg and the sperm, the woman for whom the fertilised egg was created or the spouse of a person providing the egg, or the sperm of the woman for whom the fertilised egg was created.

Thirdly, many experts believe that even if much of the potential of adult stem cells is realised there are circumstances where they are unlikely to be compatible. For example, where a person suffers a genetic disorder or some types of cancers, adult stem cells isolated from that individual may retain the damaging genetic alterations underlying the disease and so be of little therapeutic value. Furthermore, there is a view that the isolation and growth of adult stem cells have to date proved to be very difficult, although I noticed, if not just a few weeks ago, that there seemed to be further scientific advances in this area and they seem to occur on a regular basis. Stem cells generally represent a very small proportion of cells in adult tissues.

In thinking about the issue I contacted a constituent and a long time friend of mine, Dr John Allen, one of Queensland's leading IVF experts. I had him explain to me the process of collecting IVF embryos. My simplified understanding of this is the following. Following fertilisation, the egg begins to divide, developing in the process a greater number of cells. This continues as the egg passes along the Fallopian tube until about the 16 cell stage at which time the embryo is implanted in the uterus. It is my understanding that the embryos are collected, usually at the eight cell stage—but I think they can be collected by up to the 16 cell stage. From my viewpoint I do not see life beginning at a particular point in time, that is, fertilisation. Rather, it is a process which has been interrupted before completion. In this sense a collected eight cell embryo has not reached the point at which it is ongoing human life. I guess that is one of the ethical dilemmas that people have to resolve in their own mind. Also, I do not really see any significant moral distinction between allowing embryos to succumb to room temperature, the unfreezing of the kept embryo as against destroying them through research that might in fact advance life-saving or life-enhancing therapies. I am also, as somebody who has been trained in a scientific endeavour, reminded of the way that we have actually changed our view of science and the way we even look at ourselves—

Mrs Edmond: The earth is no longer flat.

Dr WATSON: I was actually going to mention that. There are a number of classic examples.

A government member interjected.

Dr WATSON: I think you are trying to be political there; I am not. The examples are the issue of the geocentric versus the heliocentric view of the universe in which the heliocentric view—

Mr Purcell interjected.

Dr WATSON: It was held back because of religious dogma for a long period. In fact, some of the developments only came to being after the people died or towards the end of their life. This applies in the same way that we actually viewed life. Aristotle had a view of there being four elements and every body, both human and heavenly and whatever, was made up of four distinct elements. That embedded the way we as a human race viewed the world for centuries. That view has now changed. I am sure that in the future our views of the world will change yet again. In fact Thomas Kuhn wrote a book called *The Structure of Scientific Revolutions* in which he examined that in some detail. I am aware that our views even of the way we view those basic things I spoke about earlier on may change.

A third argument against embryonic stem cell research was based on a fear among the community that allowing such research represents the thin edge of the wedge. From my previous work in the scientific area, I know that argument is used in respect of a lot of developments. For example, although nuclear development has some downsides, it has also provided tremendous benefits for the human race. Whenever one is looking at pursuing a scientific development, there is always the risk that it could be used differently in the future. That is one of the challenges that we as a human race have to face. We have to address each development on a case-by-case basis.

Finally, as I said, many experts believe that the use of embryonic stem cells is unnecessary because of the existence of adult stem cells and the success that adult stem cell research has already had. Again, my view is simply that we do not know what the outcomes will be at this stage. Although adult stem cell research holds a lot of promise, there is also the potential, as I mentioned earlier and as one of the advocates for embryonic stem cell research said, that embryonic stem cell research will

provide a greater range of life enhancing therapies and address issues that confront us in a medical sense much more effectively. At this stage, it is probably too early to close off those options.

I have thought fairly hard about the ethical issues involved and about the potential for embryonic stem cell research. I have come to the conclusion that it would be appropriate for the parliament to support the passage of both of these bills. I think they provide both insurance against incorrect research in the cloning area and also a correct regulatory framework to allow significant scientific development in the area of embryo stem cell research.