HUMAN REPRODUCTIVE TECHNOLOGY AMENDMENT BILL 2003

Second Reading

Resumed from 26 June.

MR C.J. BARNETT (Cottesloe - Leader of the Opposition) [4.30 pm]: I point out that I am not the lead speaker for the Opposition. The member for Murdoch is the lead speaker. However, I rise to make some introductory comments in this debate. This will no doubt be one of the more significant debates held in the Parliament during this term of government. The Human Reproductive Technology Amendment Bill covers a range of issues, including science, medical research, the desire of couples to have children when that is difficult to achieve, medical ethics and moral and religious values.

I do not intend to go through the detail of the Bill, but I wish to lay down a few parameters that I think matter to this debate. First, I briefly remind the House that the Human Reproductive Technology Amendment Bill 2003 is the result of an agreement reached by the Council of Australian Governments on 5 April 2002. It was agreed at both a federal and state level that nationally consistent legislation would be introduced and it would do a number of things: it would ban cloning, regulate human embryo research and address the issue of diagnostic testing of embryos that may potentially be implanted in a woman to create life. Essentially, it is about what happens to embryos that are surplus to the needs of in-vitro fertilisation for couples wishing to have a child. The Commonwealth has already passed two Acts - the Prohibition of Human Cloning Act 2002 and the Research Involving Human Embryos Act 2002. It is significant that the Commonwealth passed two Acts. They deal, in the first instance, with the issue of cloning and then they deal with research involving human embryos and the related issue of the diagnostic testing of embryos before implantation. This Bill seeks to amend the Western Australian Human Reproductive Technology Act 1991 to give effect to the agreement that was reached by the Council of Australian Governments. I will leave others to go through the detail of the Bill.

I place on the record that the Liberal Party has decided that Liberal members will have a free vote on this legislation. It is a fact that Liberal members of Parliament always have a conscience vote; they are always entitled to vote against a party position on the understanding that they inform their colleagues of their intention to do so. In this case the Liberal Party has not taken a position on the Bill itself; it has deliberately decided that each member will decide how he or she will vote on the Bill and on individual component clauses of the Bill. It is important that it be a conscience or free vote because, as I said, the Bill relates to the issues of medicine, medical ethics, family values, the prevention of disease and the avoidance of the birth of children with severe disabilities. It covers a range of ethical issues, both medical ethics and wider ethical values, as well as moral and religious values. There is an element within this debate of the right to life versus choice, which was debated at length when the abortion Bill was before this House several years ago. Although this Bill is not as contentious as that legislation, it has similar elements and members' differing points of views will no doubt become apparent during this debate.

The first point is that Liberal Party members will have a conscience vote on this Bill. Secondly, the Bill should be split. I call on the Government to split the Bill so that the issue of cloning can be dealt with by itself and research and diagnostic testing can be dealt with separately. It is my judgment that this Parliament would be unanimous in a resolution to reject the capacity to clone human life. It is important that Parliament take that unanimous position if it so desires.

If the Bill is not split, a number of members on both sides of this House will face a dilemma. They may be vehemently opposed to cloning while supporting the other part of the Bill. Some people may be fundamentally opposed to some of the research and diagnostic aspects of the Bill. For that reason, they will vote against the Bill and, by default, be forced to vote against a Bill that bans cloning. That might not be something they want to do. They should not be placed in that position. I recommend that the Government deal with these issues separately. I suspect that the issue of cloning could be dealt with by a strong resolution across party lines. On the more complex issues of research and diagnostic testing, members will have an array of opinions. I am aware that a group of members, drawn from across party lines, will introduce amendments to this Bill. Members should, as I will, listen to their case with an open mind. This is about a Parliament examining an issue that is difficult ethically, scientifically, medically and morally. We should take the time to listen to members' points of view. I am also aware that people hold various views on this legislation, that they respect each other's view and that many of them have done an enormous amount of work and research on these issues.

As just one of the 57 members in this Chamber, I support the Bill in broad terms. I have a fundamental belief that we should support and encourage the development of science and of mankind's creative skills to enable them to assist couples who cannot have children. We should encourage people to use their talents to continue their research into finding cures and preventing diseases so that the number of children born into this world with

severe and chronic disabilities is reduced. In saying that, I am very aware of the various ethical and moral views held by others, and I hold similar views. I do not support cloning or the creation of embryos for research purposes. However, I support diagnostic testing. If scientists have the capacity to test an embryo before implantation for a chronic disability or a disease, subject to proper medical ethical standards, the parents are entitled to know if they find something.

I imagine that it would be heart rending for parents who have had difficulty conceiving a child and are having in-vitro fertilisation treatment to decide whether to continue with a pregnancy after finding that there is a high risk that the embryo is carrying a disease or a gene that will result in a disability, regardless of whether it is severe. Diagnostic testing should be available and the decision about whether to proceed with the implantation should be made by the woman on the advice of the doctors, hopefully in conjunction with her husband and with whomever else the prospective parents wish to consult. I have a view that it is their right to make that decision. They should do it with guidance and advice, but it is up to their conscience when they make that decision.

I do not intend to go through the detail of the Bill. It is an important debate for this Parliament. I hope that members listen to the debate and to the points of view and arguments that will be put. It is important that we, as a Parliament, carefully consider this legislation. I hope that we, as the Western Australian Parliament, will make a wise, moral and ethical decision.

MR M.F. BOARD (Murdoch) [4.40 pm]: I am lead speaker on this important Bill before the Parliament. It is probably the most important Bill we will deal with this year and probably one of the more important Bills that members will deal with during their time as members of Parliament. There are not that many occasions in the Parliament on which we deal with issues of such consequence - issues of life and death, mankind and humanity, and science - in such a technical way that we, as legislators, can play a role in aiding and abetting research to the degree that it affects and enhances humanity. That is before us with this amendment Bill.

It will be a difficult Bill for the Parliament to deal with in all senses because, like a number of other Bills on which there has been the opportunity of a free vote, it will take members to the core of their beliefs, their roles, what they stand for and how they stand up and are counted on the more difficult issues that come before this Parliament. Hence, it is significant and I congratulate the Government for bringing it on.

We were ahead of the game in some respects in the Act that this Bill is amending. This amendment Bill follows the national agreement and the subsequent legislation in other States. I am pleased that the Liberal Party has decided on a free vote, because free votes are very important for the working of the Parliament. I hope that the people whom we represent will have the opportunity to see what happens when members of Parliament have a free vote and the important workings of the Parliament when members are able to speak directly from the heart on their personal beliefs and to cast their votes according to those personal beliefs and the people they represent.

I want to address that issue first. When given a free vote in a party political system, there is always the dilemma of whether members vote according to their conscience and beliefs or whether they represent the views of people in their electorate. As we saw during the debates on the medical care of the dying and the abortion legislation, quite often those two aspects can be in conflict. Members of this Parliament have been in tears when trying to come to grips with the fact that, because of their religious beliefs, their personal beliefs, their backgrounds or their experiences, they want to vote a certain way while knowing that probably the majority of their electorate want them to vote the opposite way. Members have questioned what constitutes their right to vote according to their conscience rather than the wish of the people whom they represent. I suspect we will see a fair bit of that during this second reading debate, and also during consideration in detail, particularly when the amendments that are foreshadowed by the member for South Perth are brought before the Parliament, because those amendments may test members' personal views on the Bill.

The Leader of the Opposition has indicated that it is his preference that the Bill be split. That also has been proposed in some of the foreshadowed amendments. In both the federal Parliament and a number of state jurisdictions the original Bill was split into two separate Bills. The Queensland Parliament split the original Bill into two Bills, only to amalgamate it again into a single Bill during the course of the debate; I am not sure of the reason, but it must have had a rationale for it. The Government, in bringing forward this Bill, must be confident that it has the numbers to progress the Bill through this House and possibly also the upper House. We know that there are members on both sides of this Parliament who, because of their religious or personal beliefs, will not be able to accept parts of the Bill, yet they are obviously totally against human cloning. I hope that no-one in this House would endorse human cloning in Western Australia. If the Bill were split, members would have the opportunity to support that part of the Bill that seeks to prohibit human cloning and to give a sign to the community that the Parliament unanimously - a rare sign, indeed - opposes that which is currently technically available to mankind through technology and research. That would then provide the opportunity for members to

concentrate on the second part of the Bill, which deals with the difficult issue of the use of human embryos for research. I believe the testing of embryos for personal use should be available to Western Australian citizens. However, the use of human embryos for research, and the dilemmas that are associated with surplus embryos, may be contentious issues for some members. Hence we on this side would like the opportunity of dealing with the Bill in two separate parts.

The Government indicated in the second reading speech on the Bill, which was introduced and read to the Parliament by the former Minister for Health, Hon Bob Kucera, that it does not believe it is possible to split the Bill into two separate Bills, because that may weaken the original Act. Yet, I know that some members of the House have advice to the contrary and I believe it has happened in other jurisdictions. Indeed, according to the Council of Australian Governments' agreement, Western Australia's legislation is supposed to mirror the Commonwealth Parliament's legislation, which was dealt with in that way. It is a credit to Western Australia that it has the Human Reproductive Technology Act 1991. At the time it was enacted it was cutting-edge legislation in Australia and, to some degree, the world. The Act clearly spells out the Parliament's intention at the time. I believe it indicates the way in which the rest of the Australian States and the Commonwealth should legislate for human reproductive technology.

I will read to the House the excellent preamble to the Act. It is unusual to see a preamble to legislation. I believe every Act should contain one. A preamble clearly indicates the whole purpose of an Act, the intention of the Parliament and the direction it was taking at the time the legislation was enacted. To sum up, it clearly indicates the feeling of the Parliament, the reason for the Act and what it was trying to achieve, without the legalese that is often found in legislation. The preamble to the Human Reproductive Technology Act comprises a couple of short paragraphs. It is important to read it into *Hansard* as we move through the various events that have occurred in the past 12 years to see where we have moved from since the Act commenced and to reflect on the intention of the Parliament at that time. The preamble to the Act will become irrelevant because with this Bill the Government will amend the preamble, which is a very unusual situation. The original preamble of 1991 stated -

A. In enacting this legislation Parliament is seeking to give help and encouragement to those eligible couples who are unable to conceive children naturally or whose children may be affected by a genetic disease.

B. Parliament considers that the primary purpose and only justification for the creation of a human egg in the process of fertilisation or embryo in vitro is to so assist these couples to have children, and this legislation should respect the life created by this process by giving an egg in the process of fertilisation or an embryo all reasonable opportunities for implanting.

C. Although Parliament recognises that research has enabled the development of current procedures and that certain non harmful research and diagnostic procedures upon an egg in the process of fertilisation or an embryo may be licit, it does not approve the creation of a human egg in the process of fertilisation or an embryo for a purpose other than the implantation in the body of a woman.

D. Parliament considers the freezing and storage of a human egg in the process of fertilisation or an embryo to be acceptable only:

(i) as a step in the process of implanting; and

(ii) only in extraordinary circumstances once the freezing and storage of eggs can be carried out successfully.

That is the preamble to very important legislation. It is significant that it was cutting-edge legislation in 1991. How things have changed in only 13 years in our community, such as in technology, advances in science and the ability to assist people in all sorts of ways, not only with in-vitro fertilisation or stem cell research but also with health generally. Incredible technological advances have been made in the area of health, including technical radiation equipment used for scanning and diagnostic purposes and for treatment. Incredible advances have been made whereby patients who undergo transplants and other difficult operations that used to take days are in and out of the operating theatre within hours. Today, about 50 per cent of procedures are done within an hour. Procedures that either could not be done 15 or 20 years ago or which would take a long time, including colonoscopies, are now done within an hour and the patients are sent home within two hours. We have seen incredible advances.

The dilemmas and difficulties members of Parliament face is making sure that the laws provide opportunities and guidelines for the direction that medicine takes without retarding the scientific opportunities. We need to have ethical and moral debates about the appropriate guidelines and safeguards that must be put in place. That is our role as representatives of the community. That is our important function, because the science industry has

the energy and the technology to go anywhere, and it will do it. However, it needs guidance. Without guidance humanity could be put at risk; concerns could arise for the long-term future of mankind. Therefore, it is appropriate for members of Parliament to consider the moral standards and ethics involved and to represent the community. We must encourage and support research in a way that protects the long-term future of our species.

The Human Reproductive Technology Act was cutting edge and it led to a great deal of debate in Australia. Over the next 10 years, a range of scientific developments occurred, including the cloning of animals. Also, scientists can now diagnose and test the smallest number of cells of a human being to the extent that they can determine genetic diseases long before an embryo is implanted into a woman's womb; hence, genetic diseases can be avoided. All these developments create dilemmas.

I refer to the significant report by the Select Committee on the Human Reproductive Technology Act 1991, which was tabled in Parliament in April 1999. The committee reviewed the Act because of all the dilemmas and issues that had arisen since the introduction of the Act in 1991. The report points to a few problems that were emerging with the Act. Some of those problems include the time restrictions that were placed on people who were seeking to undergo in-vitro fertilisation and whose eggs had been frozen. They wanted to be given longer than three years in which to use the eggs that they had donated. The point is that in some instances the three year restriction that was placed in the Act - because the Government believed that was the correct thing to do - did not allow for the length of time it took to undergo IVF treatment. To some degree, the Act did not provide for people who wanted to undergo IVF to increase the number of children they already had. Another dilemma was that egg donors who had left the program and whose frozen embryos or eggs continued to be stored could not be found. That created a dilemma about what would happen with those frozen embryos.

The national Government recognised that these issues were being debated internationally and in Australia. Hence, the Council of Australian Governments in 2001 issued a communiqué under which all the States agreed to operate under a national framework and to introduce consistent legislation for human cloning and reproductive technology. The States agreed that the Commonwealth would introduce framework legislation in June 2002. This was an important role for the Commonwealth because it took the lead in an international debate of consequence. Under its trade powers, the Commonwealth was concerned about developing trends internationally, and the possibility of human embryo trade across our borders. It was also concerned about other aspects that could come into play without the application of state legislation. Although it did not have the ultimate power to regulate or legislate in this area, the Commonwealth moved to put a national framework in place. The agreement was that all States would introduce mirror legislation to deal with aspects of human cloning and embryo research. That legislation is being implemented around Australia.

I now refer members to the Council of Australian Governments communiqué under which we are working and which led to this point; it reads -

> The Council agreed that the Commonwealth, States and Territories would introduce nationally-consistent legislation to ban human cloning and other unacceptable practices. The Council noted the Commonwealth intends to introduce legislation by June 2002.
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> The Council agreed that research involving the use of excess assisted reproductive technology (ART) embryos that would otherwise have been destroyed is a difficult area of public policy, involving complex and sensitive ethical and scientific issues. Having noted the range of views across the community, including concerns that research could lead to embryos being created specifically for research processes, the Council agreed that research be allowed only on existing excess ART embryos, that would otherwise have been destroyed, under a strict regulatory regime, including requirements for the consent of donors and that the embryos were in existence at 5 April 2002. Donors will be able to specify restrictions, if they wish, on the research uses of such embryos.
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> The regulation restricting the use of embryos created after 5 April 2002 will cease to have effect in three years, unless an earlier time is agreed by the Council. The Council also agreed to establish an Ethics Committee with membership jointly agreed by the Council to report to the Council within 12 months on protocols to preclude the creation of embryos specifically for research purposes, with a view to reviewing the necessity for retaining the restriction on embryos created on or after 5 April 2002. The Council also agreed to request the National Health and Medical Research Council (NHMRC) -

That body will be referred to often as we debate this Bill -

> to report within 12 months on the adequacy of supply and distribution for research of excess ART embryos which would otherwise have been destroyed.

As I indicated, the rationale for that communiqué was to implement a national framework and encourage the States to introduce mirror legislation, as they had agreed. The Commonwealth clearly indicated on 5 April that

there was a bank of embryos surplus to assisted reproductive technology requirements that could be used for research and that it did not want to encourage the production of human embryos solely for the purposes of research. Most of the other States have adopted that position and introduced legislation. The Queensland, Victorian, South Australian and New South Wales Governments have all introduced legislation into their Parliaments, and most of that legislation has been proclaimed.

The Research Involving Human Embryos and Prohibition of Human Cloning Bill was introduced into the Queensland Parliament on 25 February 2003. Interestingly, on Tuesday, 11 March 2003 the Bill was divided by a resolution of the Parliament into two Bills, the Prohibition of Human Cloning Bill 2003 and the Regulation of Research Involving Human Embryos and Assisted Reproductive Technology Bill 2003. On Wednesday, 12 March, the two Bills were reconsolidated by resolution of the Parliament into the Research Involving Human Embryos and Prohibition of Human Cloning Bill. I am not sure why the Parliament agreed to a single Bill after it had split it. The Victorian Government introduced a single Bill, the Health Legislation (Research Involving Human Embryos and Prohibition of Human Cloning) Bill 2002, and it was assented to on 6 May 2003. The South Australian Government introduced the Research Involving Human Embryos Bill 2003 and the Prohibition of Human Cloning Bill 2003 on 19 February 2003, and they passed through both Houses with minor amendments. I am not sure whether they have yet been proclaimed, but I assume that if they have not, they will be soon. The Human Cloning and Other Prohibited Practices Bill 2003 and the Research Involving Human Embryos (New South Wales) Bill 2003 were introduced into the New South Wales Parliament in May 2003 and passed both Houses on 1 July 2003. They come into effect on a date to be proclaimed. I understand that Tasmania, the Australian Capital Territory and the Northern Territory have not yet introduced legislation but are planning to do so.

That brings us to our legislation, the timing of which is to some degree further behind that of the other States. I understand that the Department of Health, COAG and others have made a great effort to ensure that there has been a fair amount of consultation about this Bill.

At this point, it is appropriate for me to put on the record of the Parliament exactly what we are dealing with. It is important that people reading *Hansard* know what lies before us. As the lead speaker for the Opposition, it is important that I outline exactly what we are amending and what we need to deal with. Before I do that, I refer to the report of the Select Committee on the Human Reproductive Technology Act 1991. The Acting Speaker (Ms K. Hodson-Thomas) was a member of that committee, and I can see her signature on the fairly lengthy report. A number of the recommendations were cutting edge for their time. There was a clear change between 1991 and 1999, when this extensive report was published. It looked at all the jurisdictions in Australia and many in other parts of the world. There are pages and pages of recommendations, so I will not go through them all. I wish to refer to just one, recommendation 6G, which clearly indicates a change in the direction of the thinking of the Parliament of the time, as expressed by this bipartisan committee. The recommendation reads -

> That embryos created for the purpose of implantation but subsequently not required, be allowed to be used for research with the Reproductive Technology Council's approval and the written consent of the people with the rights and responsibilities to make decisions about the embryos, in accordance with the 1996 National Health and Medical Research Council's guidelines which have been amended to reflect the Select Committee's point of view.
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> That a 14 day limit to embryo development *in vitro* be retained in Western Australia as provided for in section 7(1)(c) of the *Human Reproductive Technology Act 1991*.

That is a clear change; a significant recommendation very different from what is contained in the Human Reproductive Technology Act. It shows how much things had moved on by then, and how much we had learnt about reproductive technology. It also demonstrates how much members of Parliament have become aware of their ability to assist not only people with difficulties in reproduction, but also those seeking to have children without debilitating or even fatal genetic diseases that confer no quality of life. I read in the report about the dilemmas faced by members who saw the possibility of helping people through some sort of change. During that time there was a rise in the number of clinics dealing with artificial reproductive technology throughout Australia. A number of those were specialist clinics dealing with parents who had difficulty in reproduction. Hence, the number of stored eggs and embryos increased as well. Some of the difficulties I outlined earlier began to come to the fore because people had dropped out of programs and were no longer to be found. Other issues arose as a result of the technical difficulties people encountered during their time with the clinics.

I want to deal with some of the issues involved in this legislation and how it has come to pass that the 1991 Act requires amendment. I will begin with the important issue of genetic testing of in-vitro fertilised embryos. The Opposition has been well briefed by a number of people, including the Department of Health reproductive technology people, those involved in counselling and members of the community who have suffered from the

inability to test embryos before implantation. This has created dilemmas for parents in making a decision about the birth of a child who is carrying a genetic disease that has been picked up through amniocentesis, which is permitted in our State. The parents must decide whether the mother should carry that child; alternatively, they face the most incredibly difficult decision of whether to terminate a child's life based on the fact that that child would not be able to enjoy any quality of life. It is incredibly difficult to place people in those circumstances.

I will discuss this issue. In doing so, I should indicate that this goes to the very core of what we, as members of Parliament, need to address in this Bill; that is, the testing of embryos and what happens to spare embryos at the end of an in-vitro fertilisation program. Will those embryos be stored somehow forever; will they be donated to somebody else; or will they be allowed to die, if that is the correct term? Using that term is emotive, because some people will argue about when life does and does not start, and that it is inappropriate to use the term "to die". In fact, many of the briefing notes state that they succumb; that is, they no longer exist; they warm up after freezing and succumb. Whatever term people want to use, the reality is that the embryo will no longer exist. Therefore, the dilemma before us is whether those embryos should be used to benefit mankind, taking into account the moral and ethical issues in dealing with that. Notwithstanding that the Commonwealth and the other States have already dealt with this issue, and obviously supported it and are signatories to the agreement, each and every one of us must stand up and be counted on this issue. I believe this Bill will pass through this House and the upper House, and so it should. However, in doing so, it is important that people put on the record their concerns about where we are heading with this legislation.

IVF treatment is available in Western Australia in situations in which a woman or a couple is infertile, or to avoid the transmission of a genetic abnormality or disease to a child. Because of the natural decline in fertility that commences from about the age of 30 years, a considerable number of older women are included among the infertile women undergoing IVF treatment. In 2000, 52 per cent of women commencing IVF were aged 35 years or over.

Techniques are available that allow the genetic testing of embryos created using IVF technology before they are implanted; that is, pre-implantation genetic testing. It is possible to remove one or two cells from an embryo in vitro as early as three days after fertilisation, when the embryo consists of only eight to 10 cells, without detriment to its further development. The removed cells can be tested for genetic or chromosomal disorders. Decisions can then be made about whether to attempt to use in any further fertility treatment an embryo identified as having a genetic or chromosomal disorder.

Pre-implantation genetic testing may be carried out for two distinct reasons. Pre-implantation genetic diagnosis, or PGD, as it has been referred to and may be referred to during the debate on this Bill, is the testing of IVF embryos for hereditable genetic conditions that are known to be present in the family of those seeking treatment and from which the embryos are known to be at risk. Many inherited diseases may now be specifically tested for through PGD, including Tay-Sachs disease, a disease leading to neurological deterioration and early death; Huntington's disease, a late-onset disease causing progressive muscular deterioration and dementia; and achondroplasia, which is a form of dwarfism. Some conditions are sex linked; that is, they run in particular sexes. Identification of the sex of the embryo can be used to avoid transmission of these sex-linked diseases, including Duchenne muscular dystrophy, a form of muscular dystrophy that effects only boys. Members of Parliament had the wonderful opportunity of being briefed by Sonja Jenkins about the incredible difficulty she faced as a mother with four boys who suffer from muscular dystrophy. As I said earlier, she had to make difficult and heart-rending decisions about what she would do in those circumstances. Members should make no mistake: these are the issues that face us in this Bill; and, hopefully, Sonja Jenkins is the type of person we can assist as a result of moving in a way that is guarded, responsible and protective and maintains ethics and standards. We must move things forward to assist people in the testing of their embryos before implantation. Currently, that is not available in this State, and that is an important aspect of this Bill.

There are a number of other comments that I want to place on the record, including some on embryo storage. Infertility treatment for a woman routinely involves a course of hormone treatment to stimulate multiple egg development in her ovaries. The eggs are collected and fertilised to create embryos. This is the process with which we must deal. To avoid the need for repeated ovarian stimulation in every cycle of infertility treatment, some of the embryos created are frozen for use in future cycles of treatment. Frozen embryos may be thawed and implanted in the uterus of the woman for whom they were created to achieve pregnancy. Embryos created during treatment are usually held in storage until the person or couple for whom they were created decide they have completed their family or decide to cease treatment, in which case the stored embryos become excess embryos. This decision is often difficult, and once they have identified that their frozen embryos are in excess of their needs, the person or couple for whom the embryos were created must also decide on, and consent to, one of three options for their excess embryos. As I said earlier, they either let the embryos succumb, donate the embryos to another couple - that is, transfer them in order to achieve pregnancy - or donate them to research for

other uses. Although that option is available in other States, it is not available in Western Australia. That is what we are dealing with in this Bill.

One of the three distinct areas of this Bill is human cloning, which was banned in the Human Reproductive Technology Act. That ban will be reinforced more strongly in this legislation, as was done in the national legislation and in the other States' legislation. Whether or not we separate that issue into another Bill, human cloning will be banned. The two issues we will deal with that relate to human embryos are the testing of embryos by an individual prior to implantation and the need to predetermine whether that embryo has a genetic disease. There will be argument in this Parliament about genetic disease and the donation of spare embryos for research. There will be debate in this Parliament about whether there is a need for embryo research and whether stem cell research can achieve all the things that embryo researchers claim are needed. Every national and state jurisdiction had this debate. I have been to a number of briefings at which some people involved in research have indicated there was no need for embryo research at all; that research into stem cells from the umbilical cord and adult stem cells can achieve the same sorts of things. I do not know that. The research community had a big debate about that. I am not in a position to say whether that is correct. What I do know is that we are in agreement on a national framework. Many people have looked at this from a national and state-by-state basis, and there is a certain amount of trust involved in our legislators. I understand amendments will come forward, and I agree with many of them; I think they are significant and will strengthen the Bill. However, there will be issues about whether we support at all the use of spare embryos for research. I have some concerns, not only as shadow Minister for Health, but also as a parent. I must also consider who I represent as a member of Parliament and what I think my community would expect me to do. I am also a Catholic and I will receive a great deal of mail - and I do - about this issue. There is also concern about supporting organ donations and transfers and the development of organs outside the body, such as the development of artificial skin and a whole range of things to put into a human body to promote and extend the quality of life. The member for Churchlands provided me with an incredible article that was written by Archbishop Carnley, concerning the moral dilemma about this very issue. In summary - and I hope I summarise the article correctly - his point of view was that God gave man choices to make and the ability to make those choices with research and move the human species forward. His argument was that this was a natural progression of the sort of moral dilemmas that we face; in other words, if we have the ability to do this research, it is something - for those who have a religious conviction - that God wants us to do. Hence, we accept that we have the ability to break through and achieve those things, as we have done in many other areas of medical science or science generally, which have made our lives better. Notwithstanding the great problems in our community at present, this has generally enabled people to live longer and, for most people, it has provided a higher quality of life for their period on this Earth. I see this in the same way. I see it as technology assisting not only individuals but also mankind to deal with difficult genetic diseases that do not give any quality of life. We must safeguard this and not allow research into embryos for flippant and non-critical genetic problems.

Issues have been raised about cosmetic use. A person might consider that he has a problem with his physical make-up; he may not like the degree to which he can hear, speak or see. We must make ethical decisions about where to draw the line. The dilemma will be whether to do that as a Parliament through legislation, or whether to allow outside bodies such as licensing bodies to do that. That has happened in the case of the federal legislation and in the legislation of other States. That will present a dilemma, because people do not have a lot of trust in many things any more; people do not have a lot of trust in government bodies or organisations, or in research. Members of the research community have not been at each other's throats, but there has certainly been a big debate about whether this is required at all or whether it could be achieved in another way. It is very difficult, as members of Parliament, to decide on that. How do we make sure that propriety and ethics are maintained, and that we do not allow any use that would degrade a human embryo or its potential, notwithstanding that it will succumb in any case? The point is that we must maintain dignity. That is one of the dilemmas we will face. I understand that an amendment will be moved in an attempt to strengthen the amendment Bill in that regard.

The Western Australian Reproductive Technology Council has a strong team. I ask members to tell me whether there have been any changes to the composition of that council. I believe that Professor Con Michael is still the chair of the council. Dr Mark McKenna is the Australian Medical Association nominee on the council; Dr Roger Hart is the nominee of the University of Western Australia's obstetrics and gynaecology department - he apparently has expertise in artificial reproductive technology; Associate Professor Jeanette Hacket is the nominee of the Law Society of Western Australia; Ms Sue Hudd is the nominee of the Department for Community Development; Ms Sue Midford is the nominee of the Office for Women's Policy; and Ms Stephanie Knox is the nominee of the Health Consumers Council, which seeks to protect the interests of the community; Associate Professor Jim Cummins, a scientist, is the nominee of the Minister for Health. I ask the minister whether his nominees to the council are still Jim Cummins, Father Joe Parkinson, who provides ethical guidance,

and Dr Beverly Petterson, a nominee from public health. I assume they are the current members of the Reproductive Technology Council.

Mr J.A. McGinty: I have not made any changes.

Mr M.F. BOARD: I assume, then, that that is currently the membership of the council. The chair of the National Health and Medical Research Council licensing committee is Professor Jock Findlay, Deputy Director, Prince Henry's Institute of Medical Research. The members of the committee are Dr Kerry Breen, Associate Professor, Department of Medicine, University of Melbourne; Dr Christopher Newell, lecturer in medical ethics at the University of Tasmania; Dr Megan Best, lecturer in health, law and medical ethics at the University of New South Wales; Dr Peter Illingworth, Director, Department of Reproductive Medicine, Westmead Hospital, Sydney; Professor Donald Chalmers, Dean, Faculty of Law, University of Tasmania; Dr Julia Nicholls, member, ACCESS, National Infertility Advocacy Group, South Australia; Ms Helen Szoke, Chief Executive Officer, Victorian Infertility Treatment Authority; and Dr Graham Kay, Queensland Institute, Queensland Institute of Medical Research. Between those two committees there is an incredible balance of people with backgrounds in the areas of medical ethics, law and medicine, as well as those representing consumers and the various interest groups. Those people have a helluva job I might add. I would not like to be in a position to make decisions on research projects and what is acceptable when using a human embryo. It will be a very difficult decision to make, just like the decisions that I know those people are currently making. However, the issue before us is whether we give them additional guidance and assistance through this legislation on the restrictions on what can be considered in the licensing of research projects.

Finally, as I said at the outset, this is a very important piece of legislation. It is probably one of the more significant pieces of legislation that we will deal with while we are members of Parliament because it deals with the issues of humanity, life and death, and quality of life. Those issues are not often before us when we deal with legislation. As a result of this amending Bill, the opportunity exists to assist a great number of people who are suffering because they are unable to have babies that will have any quality of life. Some of those people have to deal with the difficult decision of whether to carry an unborn child through to full term. Then there is the difficult decision about what happens to the spare embryos or eggs from the in-vitro fertilisation program that belong to those parents but will no longer be used by them because they have either terminated the program or been successful. Before those embryos succumb, is there an opportunity to assist in the development of mankind in a positive and constructive way - a way in which we are able to maintain standards of humanity and maintain standards and dignity on their usage? These are the issues before us in this legislation, which we will deal with constructively and positively. I look forward to the debate. If every member gets the opportunity to speak, I hope they take it. This will enable us to explore a difficult issue in greater detail. We can then show the community how a Parliament, through a free vote, can operate in a way that brings down quality legislation and landmark legislation, which I hope will further the interests of the Western Australian community.

MR P.G. PENDAL (South Perth) [5.38 pm]: To come into this debate and to prognosticate about what disturbing or even hideous trends might appear on the horizon if we pass this Bill, one runs the risk of being accused of scaremongering. One might be seen as trying to stop so-called human progress or of trying to turn back the clock. However, in the course of my speech I want to show the House just how far we have learnt to overstep the mark, even in the space of a decade - a mark which people in this House helped create 12 years ago and which is now to be repositioned in a vastly more permissive and, I believe, dangerous way.

This is a Bill and a debate about stem cell research. On the surface I have no difficulty with that concept. Indeed, I count myself as a strong supporter of that research, which draws its genetic material or its stem cells from adults. We know that form of research involves, for example, material from the umbilical cord or from the nasal passage, to name but two. Both are rich sources of stem cells that are successful in medical research, offer great hope to humanity and are free of any ethical or moral consideration. However, this Bill takes us into a realm that was expressly and specifically rejected by this Parliament 12 years ago - a realm that involves the destructive use of human embryos and that will continue to change the way we value a human entity in the years ahead.

For those reasons I intend to oppose and vote against the Bill. However, I am sufficiently a realist to know that the Bill will pass and, armed with that knowledge, a group of members intend to propose a number of amendments - perhaps no more than six or seven in all - to ameliorate what we believe to be a flawed and even a bad Bill. I urge all members to give those amendments serious consideration, especially as some have been raised with us by eminent scientists who, although they support the Bill broadly, believe that the legislation requires amendments of the kind we will propose.

Members need to understand that what we are doing today takes us out of the world's best practice of 12 years ago, in which we set ourselves up as international leaders in the regulation of human reproductive technology - that is, helping infertile couples to have children - and brings us back to the pack, to the run of the mill. In the space of 12 years we have gone from the top of the class, scientifically and ethically, to the middle of the pack, and I think that is a real tragedy. Twelve years ago the parent Act came with a preamble that, to me at least, is so totally inconsistent with today's amending Bill that I would have thought the Bill was out of order. The preamble, amongst other things, states -

A. In enacting this legislation Parliament is seeking to give help and encouragement to those eligible couples who are unable to conceive children . . .

B. Parliament considers that the primary purpose -

I ask members to note this -

> and only justification for the creation of a human egg . . . or embryo in vitro is to so assist these couples to have children, and this legislation should respect the life created by this process . . .

The preamble goes on to say that Parliament "does not approve the creation of a human egg in the process of fertilisation or an embryo for a purpose other than the implantation in the body of a woman." That is the dimension with which we are dealing today. We are now being asked to positively reject that which we all expressly agreed upon a mere 12 years ago. People in my position, with my belief system, were invited to be part of the in-vitro fertilisation debate 12 years ago and, in fact, were invited to help lead it. Indeed, in the upper House where I sat at the time, I was sufficiently comfortable with the careful drafting and the intent of the 1991 Bill that I led for the Opposition when the Bill reached that House. Today, I am unable to do that. I have turned from being a supporter of a great advance to being an opponent. Why? The Parliament is being asked to repeal those very principles upon which we all agreed; namely, life once created for the purpose of producing babies for childless couples is instead to be used as nothing more or less than a repository for material for destructive research in a laboratory.

For the record, I reject the notion that only a so-called rigid minority of our society - the socially conservative or Roman Catholics - oppose destructive, embryonic stem cell research. I refer to the book *Stem Cells and the Future of Regenerative Medicine* published by the National Research Council in the United States, in which the authors make the following point -

> . . . not everyone who rejects embryonic stem cell research is either religious or conservative.

Thus, the best of philosophical positions is able to credibly express the view that destructive research on human embryos is wrong and is demeaning to the human race. I say here today that even those promoting the Bill - they extend to the Prime Minister and the Premiers - show their discomfort and uncertainty about what they are doing by insisting, as they have done, that only those so-called excess embryos created before the Council of Australian Governments agreement of 5 April 2002, can be used for destructive research purposes. In other words, embryos created after that are, as it were, "safe". If there were no moral or ethical qualms about the use of embryos, there would have been no need to place that limit in the COAG agreement in the first place.

This leads to my second concern in all of this: the general skewing of the debate in favour of embryonic stem cell research and away from adult stem cells. This is the view of not just people who hold my beliefs. Professor Alan Harvey is the professor of neuroscience at the University of Western Australia and a member of the Reproductive Technology Council. He has expressed similar concerns. He met a group of members in this Parliament urging caution in a number of ways that I hope will be reflected in the proposed amendments. In general terms, Professor Harvey supports the passage of the Bill. He also is strongly of the view that the Western Australian Bill should reflect the 5 April 2002 cut-off point in the federal legislation. Surprisingly, the cut-off date is missing from the Western Australian Bill, despite claims in the explanatory memorandum that the very point of the COAG agreement in the first place is to achieve "nationally consistent legislation". I put it to the House that without that cut-off date, this Bill fails its first test of being nationally consistent legislation.

Professor Harvey goes even further on this matter of skewing the debate; that is, the media hype that has helped build the idea that somehow the future lies in the use of only embryonic stem cells. He speaks of -

> the not always justified hype surrounding stem cells - the supposed panacea for just about every medical condition.

He goes on to say -

> the widespread statements about using embryonic stem cells to "cure" Parkinsons or Alzheimer's disease, or to repair injured spinal cords, should be treated with caution.

I remind members that those are the words of Professor Harvey as a supporter of the Bill. He goes on to say -

> If our 15 years of experience using transplanted nervous tissue from aborted human fetuses in Parkinson's patients is anything to go by, a quick stem cell fix seems unlikely.

The hype to which Professor Harvey refers is taken up in a not dissimilar vein by one Professor David Prentice, who is professor of life sciences at Indiana State University as well as being the adjunct professor of medical and molecular genetics for that university's school of medicine. Professor Prentice has cited many reports. This appears in the United States publication, to which I have referred, as supporting the argument that research on adult stem cells has all the necessary scientific potential and represents a morally less problematic alternative that obviates the need for research on embryonic stem cells, as he puts it. He apparently concedes that much of the evidence is suggestive rather than what he calls definitive. That perhaps underlines my point that even among well-balanced scientists there is a fear of being consumed by this so-called hype. Professor Prentice, incidentally, is not a Catholic; indeed, he is a Protestant, a fact that I confirmed with him as late as yesterday. He states his case as follows -

> There is very little in the way of sound reason that backs destructive research on human embryos, and much caution that should be employed. . .
>
> In short, adult stem cells are proving to be much more promising for treatment of disease, have shown their efficacy in numerous animal models such as for diabetes, Parkinson's disease, heart disease, and stroke, but moreover are ALREADY SHOWING SUCCESS IN PATIENTS, for repair of heart damage, Parkinson's, and several other conditions.

Over recent months the case for concentrating on adult stem cells has been given added weight in Western Australia by a business memorandum that has been circulated by Biocell Australasia Ltd, which is a Perth-based company that seeks to be a party to what it sees as a private stem cell therapy market worth in excess of $130 billion worldwide by the end of 2010. This company has committed itself entirely to adult stem cells and rejects the need to use human embryos. The company makes the point -

> Breakthroughs in stem cell research over the past twelve months indicate that the majority of this revenue -

That refers to the $130 billion -

> will be derived from using adult stem cells for the majority of these therapies.

Biocell makes the additional point that the richest source of adult stem cells is umbilical cord blood obtained at birth. I submit that that in itself should be the trumpet call for the Western Australian Government to step in with funding to support the creation of a Western Australian based blood bank for the preservation of these cords through a mixture of public and private funds.

On its very doorstep this State has a company that is willing to be at the very cutting edge of world research and in the provision of services that will help the cause of medical research and, vitally, in such a way as to remain entirely ethical. That in itself is a reason for the Government and the Premier, in his capacity as Minister for Science, to position themselves at the forefront of this debate by ensuring that state funds are allocated to stem cell research. If - only if - embryonic stem cell research is to be funded, adult stem cell research should be funded to a similar level. Against this background it is likely that, to the extent that a private member can, an amendment may come forward to ensure that the Western Australian Government gives equal funding to research in the adult field if it intends to allocate funds for embryonic stem cell research.

A lot of public comment had been made about the so-called genetic testing provisions of the Bill. These provisions of course overturn the 1991 provisions to which I referred earlier, which specifically limited IVF technologies to helping childless couples. I will say two things about this matter.

[Leave granted for the member's time to be extended.]

Mr P.G. PENDAL: Firstly, it is clear that the Government will have its way on the genetic testing provisions. This will doubtless give comfort to those in our community who want to screen out embryos that carry serious abnormalities. Like others, I have met the young mother who has gone to many members of Parliament seeking support for this clause. I saw her largely because she is related, I think by marriage, to Ian Taylor, a former prominent and respected member of this Chamber, whom I regard as a personal friend. She now knows that she is likely to win the day and that my arguments in this regard will not. Equally, however, she expressed herself to

be at one with me and my colleagues in seeking to tighten up the notion of genetic testing so as not to reject an embryo from being brought to birth merely because of, say, its deafness. I notice that when the deaf community in Victoria was made aware some months ago of the argument that potential members could be eliminated as embryos merely because of deafness, they expressed outrage and repugnance. Therefore, it is likely that an amendment will be moved to give greater protection to embryos with conditions that will not prevent those embryos from having a happy and useful existence.

I take the view, and it is shared by those who have a general concern about the Bill, that it would be wide open for abuse if those who carry out IVF procedures were allowed to cross the threshold and themselves enter the stem cell business. In other words, a clear conflict of interest would arise if we allowed that relationship to exist. It is likely, therefore, that an amendment will be presented to ensure either that there can be no relationship at all between the two; or that there can be a relationship, but certain precautions are needed to minimise conflicts of interest between the two on the matter of deliberately creating so-called excess embryos for research. I notice that Professor Harvey states that he takes it as a "given that IVF clinics will also be in the stem cell business". I am not sure that we should accept the position that one practitioner can be on both sides of the equation. However, putting that aside for a moment, Professor Harvey himself raises an associated but separate issue when he poses the question: how can we guarantee that parents will not be persuaded to create excess numbers of embryos that will become surplus to requirements later on? He states also that he regards that as being potentially a de facto way of creating embryos purely for research purposes, something that almost everyone is against. Given Professor Harvey's status in this field - he is also a member of the International Neural Transplantation Council - it is reasonable before our amendments come on to ask the Minister for Health to spell out, in his response to the second reading, what steps the Government has in mind to guard against this conflict of interest issue.

Concerns have been raised about the status of cloning under the Bill before the House. The concerns have been expressed in this way: like the Commonwealth and South Australian Parliaments, we need to split the Bill so that we can all be part of outlawing cloning, while those of us who oppose destructive testing can oppose that separately. I have received conflicting advice on that matter.

Sitting suspended from 6.00 to 7.00 pm

Mr P.G. PENDAL: Advice that I have on the issue of cloning is that we do not need to outlaw it, as it is already outlawed in the Western Australian legislation of 1991. My understanding is that the legislation on cloning will be left intact, even by the Government's amendments currently before the House. Notwithstanding that, it is very important that the Bill be split, if not for legislative reasons, then for reasons of emphasis and clarity. People are entitled to a clear, unambiguous message on cloning and I hope that message will be sent universally through this Parliament by the end of the week.

In the 1998 abortion debate in the House, one of the few concessions made to the minority viewpoint was, I am pleased to say, universal backing for our efforts to gain what was called a conscientious objection clause for doctors, nurses and health professionals whose belief system did not permit them to take part in abortions but whose work contracts might force that to come about. Parliament on that occasion gave that protection. I submit tonight that a similar form of protection is warranted in this case. Members can therefore expect to see on the Notice Paper a similar amendment on conscientious objection.

People nowadays are apt to take real and reasonable offence at animals that are misused in, for example, the cosmetics and pharmaceutical industries. This sensitivity has reached a point today at which many women's cosmetics carry an affirmation that no animal testing has been involved with the product labelled. For example, The Body Shop in Western Australia proudly displays its wares as being "against animal testing". The Kenkay Pharmaceuticals line specifically, and just as proudly, announces that its products are "not tested on animals". It appears difficult, even impossible, to make out a case by which we would want to treat human embryos differently, with less dignity or less respect than the animals to which I have referred. To this end, an amendment is likely to be moved to ensure that a licence cannot be issued for the use of excess embryos for a technical or commercial purpose, if that embryonic material is to be used in the testing of cosmetic or drug products.

I understand that a Canadian parliamentary committee returned a majority recommendation favouring product labelling when it dealt with this issue, although in the end, the Parliament declined to endorse that move. I note also that the Australian Senate was unsuccessfully asked to specifically ban the use of embryos for drug testing. One does not need to be a conspiracy theorist to see that the major drug companies would do their very utmost to prevent us bringing about such labelling laws in Western Australia. If members can support the no-animals-in-testing principle, what a magnificent statement we in this Parliament would make to the international community if this legislation were to ban such repugnant practices for the first time. I note that once the Bill cleared the

Senate, the best that government officials could do was to say - anonymously - that it was unlikely that embryos would be misused in this way given that licensing approval required for embryonic research would be given only when no reasonable alternative to using embryos was available. Appallingly, in my judgment, that is tantamount to agreeing that embryos will probably be used in cosmetic and drug testing in a way that we reject for animals. Therefore, it represents no reassurance at all.

The Human Reproductive Technology Act already places an onus on the Western Australian Reproductive Technology Council to monitor and report on the whole reproductive technology scene on behalf of the minister and to report to him or her as the case may be. An amendment is likely to come forward to insist that all or any of those reporting mechanisms be tabled in this Parliament. This is, in part - but in part only - a transparency clause that we often see in this Parliament and I would hope all members give it universal support. It is also designed to ensure that the RTC and in-vitro fertilisation clinics are not left in the position of the authorities in England who were effectively responsible for a white woman giving birth to a coloured baby because of a mix-up in embryos by an IVF clinic. That failure to properly track and account for embryos must never be allowed to occur in Western Australia.

In summary, I am told that one cannot stand in the way of scientific advance. However, that is not the issue. The issue is how far communities are prepared to push the threshold. I would like in advance to answer those critics who say that we must always be open to new advances. I think cloning is repugnant. This Bill effectively shares that repugnance. A mere 12 years ago, this Parliament universally shared the view that IVF procedures were to be limited to helping childless couples have children. However, scientists have now pushed that threshold and we are being asked to legitimise and entrench that threshold. The issue now is not about childless couples using IVF; it is about harvesting embryonic stem cells. This is occurring at a time when people have access to abundant supplies of adult cells.

Members say that they oppose cloning and the creation of chimeric or hybrid embryos. Unless the scientists who want to push the boundaries and the thresholds are told otherwise, they will be back in due course, for that is the nature of things. Only this month the Japanese created a human baby from synthetic sperm and eggs without the intervention of a man or woman and without recourse to the sexual act. Yet in the same month we have seen a welcome breakthrough in Australia, by which adult stem cells will be used to treat arthritis.

Finally, why do we turn to solutions that divide this Parliament, this community and people around the globe? It is not as though we are without options. Other solutions, which would not divide or cause rancour, stare us in the face. It is not an argument to say this Bill has majority support. Many things done in the name of majorities have been found to be wrong, ill-based, divisive or destructive - or all those things. Even at this late stage, the Parliament can seek to place itself at the forefront of world practice.

For those reasons, I oppose the Bill.

MR A.D. MARSHALL (Dawesville) [7.10 pm]: The Human Reproductive Technology Amendment Bill is about the future of medical sciences. The purposes of this Bill are to ban human cloning and other unacceptable practices associated with reproductive technology and regulate research involving human embryos. The debate on this Bill will be similar to the abortion debate. Members will make complex moral and ethical judgments according to their philosophy of life.

To give the House an idea why members will have a conscience vote on this Bill, I read extracts from some of the many letters my office has received. The first letter relates to testing and states -

> Dear Arthur
>
> In the coming weeks you will be asked to cast a conscience vote on the Human Reproductive Technology Amendment Bill 2003. I felt it important to detail to you how the passing of this Bill will greatly affect my family and others within WA.
>
> This is easily summed up in one word 'hope'.

I repeat that: "This is easily summed up in one word 'hope'". The letter continues -

> Over the past eight years my husband and I have tried to conceive a healthy baby. However, I am a carrier of Becker Muscular Dystrophy and the chances of passing this fatal genetic disorder onto our offspring has proven very high.
>
> . . .
>
> The passing of the Human Reproductive Technology Amendment Bill 2003, specifically clause 11(2) which amends section 14 of the Human Reproductive Technology Act 1991 would allow Pre-implantation Genetic Diagnosis [PGD] thus giving us the chance at being able to screen our embryos

> for Becker Muscular Dystrophy a few days after fertilisation and prior to implantation, as is done in other States. Currently there are many families in WA affected by the passing of the Bill, and we all pray, and 'hope', that your vote will allow us the opportunity of one day being able to have our own healthy babies free of this debilitating disease.

I also received letters regarding the research aspect of this Bill. One person wrote in part -

> The use of embryonic stem cells will always be controversial simply because obtaining them involves the destruction of early human lives - not Martians or laboratory rats. Good ends don't justify bad means

Another letter with a similar emphasis states -

> Stem cell research should be ethical, safe and effective.
>
> Harvesting stem cells from living human embryos is unethical. It involves the deliberate harming and destruction of the most defenceless human lives.
>
> Embryonic stem cells are also unsafe. They tend to form tumours. This problem has not yet been overcome in animal models. Until it is there should be no talk of human embryonic stem cell therapies.

I have received many letters. I randomly picked some to read to the House so that members could understand the emotions provoked by the testing and research aspects of the Bill. The fourth letter states -

> I am appalled to learn that there are over 10,000 human embryos in frozen storage in Western Australia and that many of these will never be given a chance to be born. This raises a real question mark over the IVF programme. How they been able to get away with producing such a huge stockpile?

This will be a very emotional debate, because people have different philosophies of life. This Bill will prohibit cloning and allow research into embryonic stem cells in existence up to 5 April 2002. The advice I have is that there are enough cells stored up to that date, and that we should not go past that date. This Bill will also allow for diagnostic testing for genetic abnormalities and disease. That again is a debatable issue, and as this debate proceeds, and during consideration in detail, the details will come out. Finally, the Bill will ban commercial trading in human reproductive material, and I certainly agree with that. In fact, I agree with all the parts of the Bill that I have just mentioned. The Bill provides for a maximum prison term of 15 years for a person who creates a human embryo clone or imports a human embryo clone into Australia. That sentence is too lenient, but the emphasis is there to remind us that all cloning will be illegal in Australia.

Stem cell research is a rapidly growing area of medical endeavour, and this Bill allows researchers to make further inroads into the cure of diseases. It will be interesting to see during the debate how different people define that urgency, and whether we should be tapping into these embryos for the future of disease control in Australia. Research will be done only on excess IVF embryos in existence up to 5 April 2002. To ensure that that happens, an ethics committee has been put in place, and I wholeheartedly agree with that. Some people are of the opinion that embryos should not be used for research, but under proper ethical standards research should be allowed to go forward to advance medical knowledge and science. We should not underestimate the sensitive nature of this Bill and we must not be upset if some of our colleagues have different opinions as a result of their philosophy of life. That is why we are here - to explore matters, improve our knowledge and have an opinion. This free debate with a conscience vote is very important for this Bill, for this House and for all of us who represent our electorates. This Bill respects human dignity and ensures that ethical values are upheld. More than anything else, it allows the enormous potential of embryonic stem cell research to be explored. I feel very confident about the way this Bill has been set up, and I commend it to the House.

MRS C.L. EDWARDES (Kingsley) [7.19 pm]: It is interesting when speaking to members of the community, and even to members in this House, to discover their knowledge of what this legislation is all about. They refer to it as the stem cell research debate. If that were all it was, no ethical considerations would need to be taken into account other than making sure that proper procedures are followed for any form of research or therapeutic use.

This Bill allows for excess assisted reproductive technology embryos - as defined in proposed section 53T under clause 37 - to be used for research. It states -

> **"excess ART embryo"** means a human embryo that -
>
> (a) was created, by assisted reproductive technology, for use in the assisted reproductive technology treatment of a woman; and

That is, IVF -

> (b) is excess to the needs of -

(i) the woman for whom it was created; and

(ii) her spouse or de facto partner (if any) at the time the embryo was created;

The definition goes on to outline a series of processes by which that can occur. What is a stem cell? Adult stem cells can even include cells taken from the umbilical cord. There was some debate about whether a stem cell from the umbilical cord was an embryonic stem cell or an adult stem cell. The baby having been born, it becomes an adult stem cell as against an embryonic stem cell. There are all sorts of cells. Skin cells normally remain skin cells all of their life and produce other skin cells. Nerve cells remain nerve cells until they die and so on. I am proud to have been part of a group that has looked at the legislation and has developed amendments to strengthen it. That group has circulated a report - report may be too fine a word. It is a three-page discussion paper about stem cells, entitled "Stem Cells - What's All The Fuss About?", and includes an appendix identifying a whole series of pieces of research and other papers referring to stem cells. It states -

Stem cells however, are those cells that can change into heart cells, nerve cells, muscle cells, skin etc.

That is exactly why they are called stem cells, because they can grow. It continues -

They are the stem or trunk from which the branches (different cell types) grow.

Where do stem cells come from? As I have said, they can come from any part of any living human being - child, umbilical cord, adult - without harming the living human being. That is why they are called adult stem cells. Umbilical cord blood is a very important source of stem cells. It has been suggested on more than one occasion that a cord blood bank should be established in Western Australia and receive full government support. More information should be made available to parents when their child is being born. I have two grandchildren, a four-and-a-half-year-old and a two-and-a-half-year-old, and that information was not readily available to my family, either on the value of the umbilical cord or the process for storing the blood from that umbilical cord until any future time when that child may need it in the event that he or she suffers some sort of disease or illness that could be corrected by developing stem cells. I seriously believe that that should be a consideration.

I also want to talk about stem cell lines. This is very important because we need to discuss how many stem cells are needed and what we are talking about in terms of the usage of those ART embryos. Currently, there are more than 70 000 stored in various places around Australia. A stem cell line is created when stem cells from a single adult embryo or single adult stem cell have been cultured in a laboratory and have multiplied over several months without changing into other types of cells. Stem cell lines have been produced from 1990 using embryonic stem cells. They came first. It was 18 months later that the first stem cell lines using adult stem cells were produced. The only stem cells that have so far helped patients are adult stem cells. I will highlight for members the treatments that use stem cells, as listed in a paper produced by Dr Nicholas Tonti-Filippini titled "The Debate on Human Cloning and Stem Cells in Australia" -

There are now many treatments using stem cells from adults including cells from the

- Brain to Treat Stroke
- Bone Marrow to treat Retina and Cornea (eye)
- Bone marrow to treat Gut
- Bone Marrow to treat muscle (inc cardiac)
- Muscle to treat Bone Defects
- Bone marrow to treat cancer
- Bone marrow to treat Multiple Schlerosis
- Bone marrow to treat Arthritis
- Bone marrow and Olfactory (nose) -

We have heard a lot about research being carried out in Western Australia using adult stem cells from the nose to treat auto-immune diseases -

. . .

- Bone marrow to treat anaemias
- Bone marrow to treat viral infection
- Bone marrow to treat blood and liver disease
- Hair follicle stem cells to grow skin

A lot of advanced research has been conducted using adult stem cells. As the member for South Perth mentioned, only a couple of days ago it was discovered that adult stem cells could be used to treat arthritis.

The issue is one of necessity. If so much successful research has been carried out using adult stem cells, what is the necessity for and fuss about using embryonic stem cells? The problem with embryonic stem cells is that they create a mishmash. There is actually a medical term for that - teratoma. It is a mishmash of cells. In some instances, that has proven to be carcinogenic. There is a real issue about developing cancers in some of the research that has been carried out, I think in Japan, using embryonic stem cells. I return to the argument of necessity. Is it a clinical necessity for embryonic stem cell research to be conducted when there has been so much successful research carried out with adult stem cells? Why the hype? Has it been just a marketing necessity?

I looked at this issue in terms of the debate a couple of years ago when Christopher Reeve, who had been seriously injured, was in Australia promoting the stem cell debate. At that time there was some confusion over the terms used by the media. The media reports show that, a lot of the time, the media was mixing up the terms when referring to stem cell research; it was unclear whether it was talking about successful adult stem cell research or successful embryonic stem cell research. I have not read any reports of any successful embryonic stem cell research for therapeutic purposes. There has been plenty of successful adult stem cell research, even though it came later. Somebody referred to it in one of the papers as the hare and the tortoise: the adult stem cell research came later and was the tortoise, but it was well and truly overtaking the hare, which was the embryonic stem cell research. The issue is whether to take the cautious approach in terms of allowing the destruction of embryos, even though they are excess embryos and would otherwise be allowed to succumb, or to allow research to overcome diseases into the future.

I am a mother and a grandmother. I have a four-and-a-half-year-old grand-daughter and a two-and-a-half year-old grandson. I love them dearly. If either one of them or my two boys were seriously struck down by some form of disease, I would want anything and everything to be done to solve their problem. However, if I had been part of an in-vitro fertilisation program and had an embryo at an IVF clinic, would I allow that embryo to be destroyed for research when I know that that research has not yet been successful and, on the other hand, there has been plenty of success with adult stem cell research? For every dollar that is being spent on embryonic stem cell research at the moment, it is a dollar less that is being spent on adult stem cell research. That is a very important part of the debate. Is there anything that embryonic stem cell research will achieve that cannot be achieved by adult stem cell research? The view is that embryonic stem cells are more fluid and flexible in terms of recreating any part of the body. However, that creates a problem in itself; they are so fluid that they can recreate into something that is referred to by the medicos as a mishmash rather than something that is known. Research to date has been unsuccessful in containing the development of embryonic stem cells. There is a complex ethical debate about this. Are we treating embryos with the respect that they deserve or are we treating them merely as a piece of tissue? If a person can get past the 5 April 2002 date and firmly believes that that date should not be changed, as I do, because we should not allow for the increased harvesting and production of embryos as a tissue resource for research, then what about those embryos that were harvested before 5 April 2002? The Prime Minister said he had seriously thought about that. In his speech he said that he could not find a sufficient moral difference between allowing embryos to succumb in this way - that is, being exposed to room temperature after consultation with the donor - and destroying them through research that might advance life-saving and life-enhancing therapies. That is why he came out in favour of allowing research involving excess IVF embryos to go ahead. That decision was made some 12 to 18 months ago. Research and technology has advanced since then and we now know a lot more. I read the second reading debate on this issue in the federal *Hansard.* On 28 August 2002 Mr Andrews referred to some submissions by Dr Trounson to the parliamentary committee inquiring into cloning and stem cell research. This is all about the numbers.

[Leave granted for the member's time to be extended.]

Mrs C.L. EDWARDES: There is in excess of 70 000 embryos in IVF clinics around Australia. Federal *Hansard* reads as follows -

> In his submission . . . Dr Trounson stated:
>
> > If we want to derive four new lines of embryonic stem cells -

Earlier I mentioned that a stem cell line comes from a stem cell and is recreated over many months -

> > we would theoretically use eight embryos and we would not really want to use any more ever again. We would have enough cells there to supply all the research institutes in Australia and probably world-wide …

This was reinforced months later when Dr Robert Klupacs, CEO of Dr Trounson's company, ES Cell International, told the committee:

> Our position is that we do not think we will ever have to go back to derive another embryonic stem cell line.

Dr Trounson reinforced this statement on ABC radio:

> Mind you, I think we may never actually use another embryo again for the work. Because the cells that we currently have are immortal. They grow, actually, forever in the laboratory.

Mr P.G. Pendal: He was talking about eight embryos, wasn't he?

Mrs C.L. EDWARDES: Using eight embryos. It continues -

> So we probably have enough for all the research we need to do, for the present time, worldwide, here in the laboratory. Here in Melbourne.

Therefore, the question of necessity is a serious one that must be considered by those of us in this Parliament.

I mentioned some of the serious concerns that I had with the legislation as well. As I mentioned earlier, the legislation regulates the use of excess assisted reproductive technology embryos within a strict licensing and regulatory regime, which will ensure that research proceeds within an ethical framework that is acceptable to the Australian community. The legislation restricts the use of ART embryos, but it does not restrict the use of stem cells. Therefore, under the legislation, embryonic stem cells could be sold or exported to jurisdictions that might allow them to be used reproductively. That is a serious flaw in the legislation. In fact, it gets even scarier than that. An egg could be produced from an embryonic stem cell that might then be fertilised by sperm in an in-vitro fertilisation procedure. Would people not be concerned if they knew that children could be produced using eggs developed from their embryo? If people had an embryo in an IVF clinic, and if an egg could be produced from that embryo, fertilised with sperm and implanted, those people could have children that they would never know about, because once people give consent to their embryo being used for research, they lose all control over the use of that embryo.

It gets even scarier than that. I refer again to Dr Nicholas Tonti-Filippini's paper. He said that the Germline Development Group at the School of Veterinary Medicine, University of Pennsylvania, had discovered that embryonic stem cells could be cultured to produce eggs, and that its discovery had been published in a major peer review scientific journal. At the time the Australian legislation was passed, it was assumed that that could not happen. This is something new, and technology is moving so fast that this legislation will be outdated before all States have passed it. This legislation needs to be amended. This is not one of the amendments that we are putting forward as a group, because it is very technical and complicated. That is not to say that we have not thought about it. We are in the process of writing to the Prime Minister, referring to the fact that there is a problem with not only that matter but also the definition of "embryo". There is a need to amend the legislation so that at least information about the possible reproductive end uses of the embryonic stem cells is given to couples and there is control of end uses to prevent the embryonic stem cells being exported, sold or distributed to those who might develop eggs from them for use in reproductive procedures or develop embryos directly from the stem cells.

Another issue of major concern is the definition of "embryo". Again, we attempted to come up with an amendment to the definition. The current Act has attempted to include embryos formed not by fertilisation by defining a human embryo in terms of a stage of fertilisation - that is, the appearance of two pronuclei - and by including the initiation of embryos formed by other means. The problem arises with embryos formed by other means. It leaves open the question, what is an embryo that is formed by other means? In the broad range of possibilities for experimenting with somatic cells - that is, adult stem cells - and germ cells and their constituent parts, when could a court conclude that, as a matter of law involving severe penalties, what had been formed was no longer just cells but in fact had become an embryo initiated by other means? The definition gives no clue as to what a human embryo essentially is or what conditions are required before one must conclude as a matter of law that such an embryo has come to be.

It is also important to note that the word "embryo", as distinct from "human embryo", is used in other prohibitions and that these uses of the term "embryo" are not defined. Thus, the use of the word "embryo" in the hybridisation clauses could be entirely flexible. It may well be that moving away from the definition of "embryo" is already one way of getting around the legislation. The definition of "embryo" in the Act needs tightening up. It has been suggested that the definition of "embryo" also include a cell formed by the fusion of an ovum and a sperm and the organism that develops from that cell, or any cell or organism, however formed, that may be distinguished from ordinary cells by having a potential, if placed in a suitable environment, to develop in an integrated way, similar to the potential of the cell formed by the fusion of an ovum and a sperm.

In fact, "human embryo" is defined in terms of the stage of fertilisation, which includes the appearance of two pronuclei. An unfertilised ovum also has two pronuclei. Therefore, there is real technical and scientific concern with the definition of "embryo" and the way it might be used to get around the legislation.

Another concern we have is that the Act prohibits importing or exporting human embryo clones, which we all support. However, should it also include products derived from human embryo clones? Otherwise, researchers could simply go offshore to clone embryos and then bring back the stem cells or other products from cloned embryos. Not every country will have the same strict ethical considerations that we in Australia are putting in place at this time. That would be a serious amendment to consider. As I said, we as a group will be writing to the Prime Minister about those issues, because the legislation would essentially become outdated before it is effectively put in place right around Australia. Complex moral and ethical judgments on this legislation are being made by every one of us. Indeed, when people contact us at our offices, regardless of whether they support or oppose the legislation, they often show very little understanding of the extent of its effects. On the one hand people support it for the hope it offers and on the other hand people who are totally opposed to the destruction of human embryos do not support it.

Where we can find the middle road has always been an issue. If possible, in consultation with the donor, surplus in-vitro fertilised embryos are disposed of after a certain time in storage, largely, as I indicated earlier, by being exposed to room temperature. Should that avenue for destruction of those embryos be allowed when they may very well provide some form of lifesaving or enhancing therapy in the future? We might wonder what is particularly special about in-vitro fertilised embryos. Why are they created? They are created through IVF so that childless couples can have children. The debate on that issue has been held in this Parliament on two separate occasions in the past 15 years. In-vitro fertilised embryos have a special character. I have very serious concerns about allowing the destructive use of excess IVF embryos. Caution should always be exercised when dealing with humanity and human dignity. Should the more than 70 000 current surplus embryos be regarded as tissue for research or should they be regarded as the beginning of human life; the reason they were created in the first place? As I said, I would appreciate any opportunity for life-saving or life-enhancing procedures to be available for my two sons or my two grandchildren if that were possible. However, I have very grave concerns that the hype surrounding this issue has created "necessity" which has not been proved. Although the hype has been somewhat reduced over the past couple of years since it was first created when Christopher Reeve visited Australia, there is a great potential and a great opportunity for life-enhancing and life-saving procedures to be developed from adult stem cell research.

I encourage the Government to support the proposed amendment that seeks to ensure that, if this legislation is passed, funding is available equally for adult embryonic stem cell research as it is for embryonic stem cell research. The Government will get more for its dollar from adult stem cell research, as has been proved so far. Why, at this early stage, should we go down the path of the destruction of human embryos when no research has emerged in the past two years to warrant such destruction?

I have been very proud to be part of the group that prepared the proposed amendments. The member for South Perth has discussed them so I will not do so again. However, I encourage the Attorney General to agree to split the Bill. A unanimous vote in the Parliament against the cloning legislation would send a very strong message that we are against cloning in Western Australia.

MR P.W. ANDREWS (Southern River) [7.50 pm]: Many members will be making a contribution to this debate. I hope that I can make a worthwhile contribution because in many ways my thoughts on this involve quite a simple proposition for me. The debate certainly involves a lot of complex science, moral and other issues. I suppose that I am fortunate in some ways because the position that I take is relatively easy for me to state. However, I realise that taking that position probably means that a lot of people will be disappointed with some of the things that I will say. That is the nature of the issues that we deal with.

The Bill certainly contains many worthwhile clauses. Proposed section 53C makes it an offence to create a human embryo for cloning purposes. Proposed section 53D makes it an offence to place a human embryo clone in a human body or the body of an animal. Proposed section 53E makes it an offence to import or export a human embryo clone. Proposed section 53G makes it an offence to create a human embryo other than by fertilisation. Proposed section 53H makes it an offence to create a human embryo for a purpose other than achieving pregnancy in a woman. Proposed section 53I makes it an offence to create or develop a human embryo containing genetic material provided by more than two persons. Proposed section 53J makes it an offence to develop a human embryo outside the body of a woman for more than 14 days. I mention those proposed sections to make the point that the Bill contains many worthwhile clauses.

The aspect of the Bill that is obviously of considerable concern to me is that which relates to the use of embryonic stem cells. The argument put forward that embryonic stem cells should be used for research purposes

has been very well canvassed in newspapers. We often see headlines stating that the treatment of Parkinson's disease, Alzheimer's disease, spinal cord injuries, diabetes and many other illnesses will be assisted by the use of excess embryonic stem cells for research. I have been to all the briefings on this Bill. I have spoken to people, including friends who are involved in medicine. I have certainly been lobbied on it by many different people from all sorts of backgrounds. I have come to the conclusion that I do not know whether it is hype that the use of embryonic stem cells could possibly lead to cures or whether there is some validity in it. I can say that, having listened to all the advice that I have been given, I simply do not know.

One of the arguments that has been put forward against the use of embryonic stem cells in research is that it would possibly act as a distraction from the central gain, which is, in some people's opinion, the use of adult stem cells; in other words, if extra funding were going into research involving embryonic stem cells, that funding would be taken away from research into adult stem cells. In my opinion, that is a valid argument.

When it comes down to it, I suppose I come from the position that the destruction of an embryonic stem cell is the destruction of a human entity. From that point on, all the other arguments that are put forward about there being so many excess embryos and so on simply mean that an excess number of human entities can be destroyed through research. The arguments for and against come down to that point, and also this: if excess embryos will in any case succumb, which is a nice word for dying, why can they not be used for research? I have thought, as I have been lying awake in bed at three o'clock in the morning and the clock has been ticking over, that there are people out there who are really hoping that embryonic research will lead to a cure for a member of their family. As I stand here, I think that could be my child. However, when it comes to a balance, I come back to my original point: an embryo is a human entity. Therefore, such research is not right. That is a relatively simple position for me to reach. The consequences are obviously far more complex. One member said that this type of research will give people hope. Sometimes people have a hope that is not a realistic hope. There is an old saying that false hope leads to a heavy heart. A consequence of this legislation is that people may put their faith in this technology, but what they hope for is not delivered.

Another argument that we need to consider, and certainly one that concerns me, is the loss of control by the parents of the embryo once the embryo has been released. A number of things may flow from that, and the member for Kingsley articulated that far better than I can. Suffice to say it is wrong that an embryo that belongs to two people can be handed to someone else and those two people will lose control over their genetic material.

The provisions that deal with genetic testing and screening for diseases are again a gut-churning part of the Bill. I have taken the position that it is wrong to destroy embryos. I have also heard the views of people who have written to various members in this place. However, again I have had to make the gut-churning decision that because of the fundamental premise that I work from, I cannot give those provisions my approval and say they are right.

I imagine that many amendments will be moved during the course of this debate, and I look forward to speaking on some of those amendments. As I have said, in a very simple way, the destruction of a human entity is not right. This Bill will facilitate that destruction. Therefore, I oppose the Bill.

MR B.K. MASTERS (Vasse) [7.57 pm]: I am pleased to offer my general support for the Human Reproductive Technology Amendment Bill. The Bill has three major parts. The first 35 pages of the Bill comprise amendments to the Human Reproductive Technology Act 1991. These are essentially non-contentious, technical amendments, and I do not propose to make any comment about them. The second part of the Bill deals with a prohibition on cloning. I doubt that any member of the House would do anything other than support such a ban. Because the proposed prohibition on cloning is such a black and white issue, and because I believe it has strong community support, I also propose not to make any further comment on this issue, other than to say that it has my strong support.

The third part of the Bill deals with the use of excess assisted reproductive technology embryos for medical research, and the testing of embryos for serious genetic disorders and deformities. This third part of the Bill is extremely contentious. I say that with considerable regret, because as a scientist I believe there will be an overwhelming benefit to human society and individuals, including families, from what I believe will be outstandingly successful medical research based on embryonic stem cell research. Certainly there are ethical and moral issues associated with the use of embryos for research purposes. I do not for a moment seek to diminish the crucial need to debate and resolve these ethical and moral concerns. A society like ours that does not involve all its citizens in a wide-ranging debate runs the risk of weakening the moral and ethical strengths on which we all as individuals and as a society depend. Sadly, however, the debate that has now commenced here in Parliament will not be repeated in the wider community. Ethicists and moralists constitute a tiny number of people in our society. I would be amazed if as many as 100 people would lay claim to those titles in a society of two million people in Western Australia. They have as much difficulty in having their voices heard as many politicians in this place have in having their voices heard on issues that are important to them. Most of the

intense debate on the issue of embryonic stem cell research is currently going on within religious groups. Again, for better or for worse, and without wishing to offer judgment, I understand that fewer than 10 per cent of Australians regularly attend church; in my view, the debate is therefore restricted to fewer than 10 per cent of the Western Australian population. I repeat, sadly, that only a small proportion of WA citizens will have taken the trouble to investigate and understand the many complex issues involved in the use of embryos for research.

Accepting that a ban on human cloning will gain total support from members of this place, the issues that I wish to discuss and that deserve to be debated considerably in the House relate to genetic testing of embryos for deformities or genetic diseases and the use of embryos in research. The first issue is genetic testing. The first question, about which there is some debate, is what is meant by "serious" in the definition of the use of a cell from a 14-day-old embryo to test for genetic disease, abnormality or deformity. Clearly there is no doubt in anyone's mind that multiple sclerosis and a range of other serious diseases can so affect the quality and quantity of life of some embryos that there would be no hesitation on the part of parents, ethicists, moralists and others in a position of influence to say that a 14-day-old embryo should be aborted or allowed to succumb. However, what if genetic testing indicated that the embryo, if implanted and allowed to grow to nine months and then be born, had a genetic predisposition to deafness, blindness or an inability to speak? What if genetic testing indicated a predisposition to albinism; in other words, being born without any melanin - skin pigment? If I were asked whether losing my hearing would be a serious concern, I would say yes. Clearly a 14-day-old embryo cannot be asked whether it believes the loss of hearing or sight in later life is something it would consider to be a serious genetic disease or deformity. To simplify the issue, I ask the question in this way: would a person such as Keith Hayes, with whom I went through university and who was born blind - I understand because of a genetic problem - have been killed while an embryo if his parents had known he would be born blind? This type of proposition is, in my view, false. It is deliberately provocative and is designed to try to convince a person by way of appeal to his or her emotion - to emotion alone - that the destruction of a 14-day-old embryo should not occur. Therefore, that type of question is unfair, false and should not be taken further by the community or members in this place. Why is it false? The Minister for Health remembers Keith Hayes.

Mr J.A. McGinty: Indeed. He is a great man.

Mr B.K. MASTERS: He is an excellent man. It is not possible for me to equate Keith Hayes, whom the Minister for Health and I know, to Keith Hayes the 14-day old embryo with no brain, eyes, face or any genuine characteristic that would identify him as a human being, other than by the DNA contained in his chromosomes. In other words, we are comparing two unequal and unalike objects, which is false and misleading. The definition of a "serious" genetic abnormality or disease must be left to the would-be parents to determine. In other words, it must be left to the donors of the sperm and the eggs that, if implanted after fertilisation, would have a high likelihood of producing human life. The matter should not be left to members of Parliament who are not the donors of the sperm or the egg; it should be left to the individual donors.

I have been briefly informed of some of the amendments the member for South Perth will move. I very strongly agree with his amendment to ensure that genetic testing cannot be used to abort, succumb or kill an embryo for cosmetic reasons. The embryo must have a genuine genetic disease, disability or deformity that the would-be parents consider serious. Alternatively, if there is any doubt about whether a genetic defect is serious rather than cosmetic, by all means let the Western Australian Reproductive Technology Council lay down guidelines. It may even be possible for that council to rule on specific cases when there is some doubt about whether a genetic defect is serious or cosmetic. The message I am trying to put across is that we should allow the would-be parents to have the final say. Members must remember that in nine months after the embryo has been tested and implanted into the woman's womb and has been carried to full term, the donors of the egg and the sperm will have a human life to nurture, love and to raise to adulthood. Neither members of this place, members of the Reproductive Technology Council nor I will have that responsibility; the donors of the egg and the sperm will. They will be responsible for living with the child if it is born with multiple sclerosis, deafness, blindness or some other impairment that the would-be parents consider serious.

The final contentious issue is the type of research to be conducted on embryos. Regrettably, the debate around this subject relates to a debate that is essentially pro-life or pro-choice. It is a debate that is very similar to the abortion debate that was held in this place some four or five years ago. I express my regret at the prospect of this debate being a pro-life or pro-choice debate because I believe it has already created some spurious and irrelevant arguments. Many of those arguments are based on emotion rather than morals, ethics and science.

I outline the arguments relating to research on human embryos that I feel are important. One argument put forward by people opposed to aspects of this legislation is that we do not need embryos to provide stem cells for research because adult stem cells will suffice. I have two responses to that proposition. The first is that to restrict medical research in this way is absolutely defeatist. No-one can predict exactly where a particular line of research will lead us. Human beings are innovative and inquisitive and have highly desirable characteristics that

should lead to continuing breakthroughs in the field of medicine over coming generations. To put up a roadblock and say that we cannot do research on embryonic stem cells for the reasons that have been put forward by others in this place is almost like cutting off the nose to spite the face. Although research into embryonic and/or adult stem cells might lead to dead ends, it is highly likely that one or both areas will provide unbelievably productive and successful medical results that could have profoundly positive effects on human health. The problem is that right now no-one has any idea which type of stem cell will lead us to that outcome, of which I am so positive. To ban one area of research to the advantage of the other is poor science and in my view contrary to the very principles on which science is based.

My second argument against the proposition that we need to use only adult stem cells is that the fundamental arguments against embryonic stem cell research are based upon the pro-life proposition. Many of its supporters distort or unfairly represent the science in support of adult stem cell usage and present it as an overwhelmingly strong, almost unarguable justification for a ban on the use of embryonic stem cells in research. My view is that pro-life or pro-choice issues should not be part of this argument. This legislation relates to medical science. The connotations surrounding the concept of embryonic stem cell research are too great to allow many people to think rationally about the subject.

[Leave granted for the member's time to be extended.]

Mr B.K. MASTERS: I now turn to the question of whether destroying a 14-day-old embryo represents the taking of a human life. The first part of that question is whether a 14-day-old embryo is a human life. It is not possible for me to give a definitive answer to that question because there is such a disparity of views. Firstly, I have not had the time to do the research into what could be the range of answers to that question and, secondly, I do not have enough time in this debate to explain them. Instead, I will quote from an article that was published in the *New England Journal of Medicine* of 16 May 1996. It is not a scientific or medical research article as such. It was published in a section of the *New England Journal of Medicine* entitled "Sounding Board", which provides people with an opportunity to write in a less than absolutely technical way to provide background or comment on interesting subjects. The article is entitled "The Politics of Human-Embryo Research - Avoiding Ethical Gridlock" and is written by three researchers: George Annas from the Schools of Medicine and Public Health, Boston University; Arthur Caplan from the Center for Bioethics, University of Pennsylvania, Philadelphia; and Sherman Elias from the Baylor College of Medicine in Houston, Texas. I have chosen to read two paragraphs from the second page of this article because I could not find a better way of explaining my views on the issue of whether a 14-day-old embryo is a human life. Under the heading "The Moral Framework Presented by the Panel" - the Human Embryo Research Panel created in 1994 to look at all the issues involved in embryonic research - the article states -

> The panel members considered and rejected the view that a human embryo has rights that completely prohibit its use in research. To those who argue that an embryo is a human being from the moment of conception, the panel responded that no single trait or property is present at conception that suffices to confer personhood, and thus rights, on the embryo . . . All human life begins at conception, but many embryos do not implant, and even among those that do, many spontaneously abort. Whatever shifts occur in the moral equation at conception, it is not self-evident that that biologic event is of such moral importance that it should cause all human embryos to be placed outside the realm of research.

On the same page, the article states, referring to the analysis of the moral framework relating to the work of the panel -

> Such an analysis is needed in order to show that having a unique genetic identity, a nervous system, a human appearance, the potential to become an adult, brain activity, or the ability to feel pain moves an embryonic entity over the line from being "deserving of respect" to having moral standing such that experimentation would violate its intrinsic rights.

That last paragraph means that, at some stage in the development of the human embryo, it moves from being a collection of cells whose only true human identity is the DNA material contained within its genes, to being an entity that has not just a unique genetic identity, but a nervous system, a human appearance, a clear potential to become an adult, brain activity, the capacity to feel pain and so on. Clearly, any scientist or medical person in the world will say that at 14 days gestation a human embryo does not have any of those characteristics other than a unique genetic identity. For that reason, I do not have any moral or ethical problems with the use of human embryos up to 14 days old for research, provided that the research is controlled and is for beneficial purposes.

To summarise: I agree with the assessment as outlined in the article I quoted from *The New England Journal of Medicine*. A 14-day-old embryo is "deserving of respect", but is not a human life that has a value so sacrosanct that it is above being used in justifiable and beneficial medical research. This is especially so when the end result of that medical research could lead to a huge improvement in the quality of life, and even to the

preservation of many at-risk human lives, as a result of the use of stem cells from an embryo. It is possible that those stem cells could provide a new organ, regenerate a severed spinal cord, or do a wide range of things that not only improve the quality of life but also add significantly to the quantity of life.

Another way of looking at this issue is not to ask what life is, but to ask instead what death is. Most people would agree that death in an adult human being is the total and permanent loss of brain function. I admit that that is a simplistic definition, but it is nonetheless simple, understandable and reasonably credible.

How can human life come to an end when that life is a 14-day-old embryo, which has no brain, no nervous system, is incapable of independent life longer than a few seconds outside a very artificial environment in a laboratory or outside the female womb, and is not impregnated into a woman's womb and hence has no potential for survival? In other words, I do not believe that that is human life with the potential, the value, the degree of sacrosanct characteristics to place it so out of reach of medical research as to make it unavailable.

There is another way to look at this issue of human life. If the definition of human life is as simple as saying anything with genetic material contained within a cell or group of cells that has the potential for life under appropriate conditions, then I must say that every individual cell in the human body is potentially another human life. That has been shown to us by virtue of the successful cloning experiments that have occurred in the field of animals. If I were to mention the name Dolly the sheep, everyone would understand that an animal was created from a pre-existing animal, identical in every way, with the same genetic material, and taken not from an egg or from a sperm or from a fertilised egg but just from a cell that had the genetic material of the original mother animal. In other words, science, for better or for worse, has progressed to a stage where it is possible that in the not too distant future we will not need any stem cells to create an organ or other cell or part of the human body. Any cell at all will do, because as the cloning of Dolly the sheep has shown, we will soon be at the stage where any human cell taken from any part of the human body can ultimately be treated in such a way as to be turned into another human being. For those people who believe that a 14-day-old embryo is human life, I must therefore say that every cell in the human body is potentially human life. The bad news is that we are emitting human cells to their death - we are throwing them away from our body every second of every minute of every day. We do this every time we breathe, every time we sneeze, every time we eat or scratch ourselves, void our wastes, cough or do any other human activity. When we do those things we are killing human cells. Science has progressed to the stage where those human cells, in time, will be found to have potential for human life, in exactly the same way that a 14-day-old embryo today will be considered by many people to have the potential for human life in the future.

So, is a 14-day-old embryo human life? Clearly the answer is yes, but in my view not in a way that deserves such total protection that its beneficial use should be banned forever. For that reason I support the third part of this legislation, the Human Reproductive Technology Amendment Bill 2003.

In the few minutes that I have left I wish to raise a few other issues. I will be happy to support some of the amendments that are to be put forward by the member for South Perth. For example, I have no problem accepting a complete ban on the testing of embryos for cosmetic reasons. A few other amendments deserve the support of this House and individual members. However, I do not agree with the proposal to split the Bill. I hear the argument put forward by people like the member for Kingsley, and I am not sure whether people on the other side have put it forward -

Mr C.J. Barnett interjected.

Mr J.A. McGinty: You make life hard.

Mr B.K. MASTERS: What case is that?

The splitting of the Bill into its two parts - on the one hand, a ban on cloning and, on the other, the regulations or controls on embryonic stem cells - offers nothing more than superficial attractiveness. As I said earlier, I am sure that no-one in this House supports the practice of cloning. It is a medical practice that so transgresses all moral and ethical standards that it simply will not get any support in this House. On that basis, I see the call to split the Bill into its two parts as little more than an attempt to have another opportunity to focus on the issues surrounding the use of stem cells either for genetic testing or research. In other words, it is an attempt to prolong the debate to make sure that people who are opposed for emotional, religious or, in their view, moral or ethical reasons to the use of stem cells have another opportunity to put forward their point of view. We can have a very coherent and sensible debate about the legislation as it is currently framed.

I have, however, advised the Clerk of the House that I will seek to make two amendments to the legislation. Those amendments will seek to remove any reference in the legislation to the date of 5 April 2002, beyond which any embryos that have been created cannot be used for research. I believe that any date, be it today's date or that date of 5 April 2002 when, as I understand it, the Council of Australian Governments agreed on a

common position, is an artificial date and an unnecessary constraint on the use of human embryonic stem cells for research. That does no more to further the debate or offer any further protection against the misuse of embryos than if no date was specified in the legislation.

I will finish by saying that in the whole issue concerning embryos, my greatest concern is not something that has been spoken about in the Chamber today. It is a very emotional and sensitive subject. It has been explained to me that genetic testing of an embryo occurs around about the stage at which there are 100 or 200 cells in the embryo. The embryo is still extremely small - I do not know exactly how small - and has a limited number of cells. I could go into the science of it all, but I think I would send members to sleep if I did. I have concerns about the impact on embryos when one cell is removed for genetic testing. The medical experts say that to remove one cell from a collection of 100 or 200 cells has been shown not to have any significance. In other words, the embryo will survive if implanted into the womb and there will be no long-term consequences. I have my doubts about that, because the process of genetic testing of embryos is only about 15 or 20 years of age. Only in the past 20 years has that genetic testing of embryos, in the method I have described, been used as a medical analytical tool. I would like medical research to be done on those people who have been subject to genetic testing to see what will happen two or three generations from now.

Debate adjourned, on motion by Mr R.F. Johnson.