Inquiry into scientific, ethical and regulatory aspects of human cloning

Submission to the House of Representatives Standing Committee on Legal and Constitutional affairs

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SYNOPSIS

We agree with Recommendation 1 of the Report of the Australian Health Ethics Committee of the NH and MRC that reproductive cloning of human beings should not be permitted. Further, the cloning of human embryos or foetuses for the purpose of the production of tissues or organs for transplantation should also not be permitted. It is even more morally unacceptable than reproductive cloning with the purpose of producing a child.

The cloning of embryonic stem cells for therapeutic purposes is less morally problematic since fewer embryos are destroyed, and these are not intentionally created in order to destroy them. However, even the earliest forms of human life are entitled to respect and protection, as current legislative regulation of embryo experimentation affirms. Care must be taken to ensure that these early forms of life do not become commodities to be exploited, as a means to the ends of others. Further, the interests of women must be especially guarded, as they may be liable to exploitation as sources of ova, or of embryos.

A purely consequentialist approach to the issue of human cloning, by which any means can be justified if the projected benefits are great enough, should be resisted. There are some things which it is simply not decent to do, and some things which a decent society does not do.

The distinction between the cloning of human beings (reproductive cloning) and of human tissues (sometimes called therapeutic cloning)

It is certainly necessary to make this distinction, but it may have been pushed too far in relation to ethical considerations. Most ethical reflection has focused on *reproductive* cloning, and has sought to find a rational justification for the almost universally negative response to it (the so called "yuk" response) In contrast, so called *therapeutic* cloning has been presented by scientists as relatively morally unproblematic, and has received less attention. However we believe this latter area is particularly problematic. The nature and scope of techniques involved are poorly understood by the public, and yet some of these technical possibilities, involving as they do the destruction of human embryos, raise as many if not more ethical concerns as *reproductive* cloning.

Therapeutic cloning may refer to the production of compatible tissue for transplantation through somatic cell nuclear transfer using either embryonic stem cell lines (ES cells) or embryonic germ cells. This is the technique which is addressed in the NH and MRC Ethics Committee report. It is morally problematic because it involves non therapeutic (for the embryo) research on, and indeed destruction of the human embryo. The task is then to determine whether, according to NH and MRC Ethical guidelines, the likelihood of significant improvement in technologies for treatment and the restricted number of embryos involved, constitutes the *exceptional* circumstances which would permit such research. However, it should be noted that this is not the only type of therapeutic cloning envisaged by some researchers or canvassed by some ethicists (Savulescu, 1999). This other type of therapeutic cloning is much more morally problematic. Indeed, it is really reproductive cloning (which has the aim of producing a human fetus which is genetically identical to another human being), because it does involve the production of such a fetus (or embryo), but not with the aim of allowing this fetus to come to term and be born, but with the aim of using it for "spare parts". This seems to us to be even more morally unacceptable than what is usually called reproductive cloning. It involves a worse violation of human dignity, and a greater exploitation and commodification of the young human being.

This type of therapeutic cloning involves the deliberate creation of a new embryo (through somatic cell nuclear transfer into a human egg) which is genetically identical and thus histologically compatible, with an individual who needs a particular tissue or organ transplantation. Up to this point, the technique is identical to human reproductive cloning. However, from this point, there are a number of options. The embryo may be sacrificed immediately in order to yield histocompatible ES cells, to be differentiated into the required tissue cells. Or, as has been proposed, the embryo may be allowed to develop for a varying length of time (currently this would require implantation into a woman's uterus), and later "sacrificed" in order to "harvest" tissue or organs. Some have suggested this would be morally acceptable up until 7 months gestation, when the foetus becomes "conscious" (Savulescu, 1999).

We recognise that this type of human cloning is not currently in view, and is not considered by the report, but **we wish to urge the inquiry to strongly repudiate this type of therapeutic cloning for tissue or organ transplantation, and to distinguish it from cloning involving embryonic stem cell lines derived from existing embryos.** Currently such cloning would be prohibited under Victorian Law (*Infertility Treatment Act 1995)* and we suggest it should be legally prohibited throughout Australia.

Two ethical approaches

One approach to ethics aims to clarify the nature of an action in order to ascertain if it contravenes any *duty*, or violates any human right, and therefore is wrong *in itself*. Examples of this approach in relation to reproductive cloning are the claims that it would be a violation of the uniqueness of human life (Bruce, 1997), or a "profound threat to what might be called the right to our own identity" (D. Callahan, 1997a). Both these claims rest on the assumption that uniqueness and individual identity requires a unique genome. This assumption which is empirically false, as the experience of monozygotic (identical) twins demonstrates. Further, from a Christian perspective, the dignity of any human being is innate, and cannot be eliminated or diminished solely because that individual is "created" through cloning technology.

When we shift to a consideration of consequences- weighing up potential benefits against potential harms- we find that, in the current state of the technology, the foreseeable harms in reproductive cloning are widely recognised to greatly outweigh any benefits. This is the reasoning behind the U.S. National Bioethics Advisory Commission (1997) recommendation of

a five year moratorium on any attempts to "create a child by somatic cell nuclear transfer" (p.8) . The Commission reached a consensus that "this technique is not safe to use in humans *at this time*" (my italics, p.8). We would certainly agree with this conclusion.

The benefits of reproductive cloning are expressed in terms of greater reproductive choice, the possibility of eliminating certain genetically transmitted diseases and freedom of scientific enquiry. The potential harms include the high wastage/low success rate of the procedure, the possibility of premature aging of clones (as has recently been reported in Dolly the sheep), disruption of the immune system (which has been seen in cloned calves), and psychological damage. Cloned individuals may well experience identity confusion even more acute than that experienced by children produced by IVF (donor) and /or surrogacy procedures. Their social father or mother might actually be their older twin, and their genetic "parents" their social grandparents. We simply don't know what it would be like to be a clone.

These considerations highlight one of the weaknesses of consequentialist ethics. Potential harms and benefits are not only incommensurable (they cannot be compared or weighed up against each other), but largely speculative. Use of a purely consequentialist approach also means that, even if the potential harms remain the same, both reproductive cloning and therapeutic cloning involving the deliberate creation of embryos or fetus for "spare parts" may eventually become morally acceptable, simply on the basis of greatly increased projections of individual and scientific benefits (D. Callahan 1997b). And the consequentialist approach tends to dominate ethical discussion in Australia, both at an academic and a popular level.

A third approach

The third main stream in ethics, the ethic of virtue, examines issues not solely from the perspective of the nature of an action in itself nor solely from the perspective of its consequences, but from the perspective of moral character, of the motives of moral agents, their *goals* and *objectives* and the virtues or vices which certain actions or attitudes reveal. Alasdair MacIntyre (1982) makes it clear that there can be no generic ethic of virtue. Rather a particular moral community shapes the character of its individual members in accordance with their particular shared, contentful understanding of what is good. The Christian church is such a moral community, and its shared vision of the good has some features in common

with, but also some which are distinctive from, those of other faith traditions, and that of liberal individualism. Liberal individualism we regard as the dominant world view in contemporary Australia.

The Christian vision shapes relational virtues such as patience, gentleness, self -control, hospitality to strangers, and communal virtues such as mutual accountability and mutual discernment- virtues which are not valued in the liberal individualist vision of human flourishing. The virtues shaped by liberal individualism include self- determination, independence, and authenticity to one's own understanding of the good. In addition, Western societies now place high value on the Aristotelian virtues of intelligence, physical beauty and health - some would say to the point of idolatry. This is in contrast to the Christian attitude of paying special attention to those human lives which are weak and vulnerable, the disfigured or disabled, the handicapped and the poor, the very young and the very old.

In relation to human cloning, a Christian virtue ethic would modify the harms/benefits analysis by giving significantly greater weight (relative to a liberal individualist analysis) to the welfare of vulnerable humans (such as embryos, foetuses and children) and the common good, than to individual procreative choice, or scientific freedom, or the quest for the eradication of disabilities. Second, the scientific quest to pursue knowledge or technology for its own sake, or for the sake of academic prestige, and the commercial drive to pursue new technologies for the sole motive of financial gain, might often be regarded as evidence of the vice of *hubris*, which is the lack of humility, the failure to recognising the limits of human responsibility.

But it is when we come to a consideration of the *objectives* or *goals* of reproductive cloning, we find one of the strongest objections to it, one which is not confined to any one moral tradition. Human dignity is affirmed by a wide range of religious and secular traditions. Since human dignity is not only innate, but also relational, it may be violated or threatened when an individual does not experience being valued or treated as worthy in herself, but rather is treated as merely a means to some further end (Peters 1997). Another way of expressing this concern is in terms of the danger of commodification of children, or the concept of "designer babies". We believe this is the moral force behind the prohibition of reproductive cloning of human beings as expressed in Article 11, Universal Declaration on the Human Genome and Human Rights, 1997.

A feminist perspective

Attention to the experience of women is missing from most discussions of human cloning. This has been explored by feminist bioethics in relation to Artificial Reproductive Technologies (ART's) in general, of which reproductive cloning is but one, though perhaps unique example. No action (or technology) can be evaluated apart from its concrete historical sociocultural context. This context remains, even in contemporary Western societies, a "specific social order in which positions of power and privilege are disproportionately occupied by men" (Farley 1985 p. 178). Therefore technologies may have different consequences for women and for men. Early feminists embraced ART's as offering freedom from the tyranny of reproductive biology, often regarded as a cause of oppression and powerlessness of women. Now however it is increasingly realised that far from freeing women from unnecessary burdens, new technologies may result in greater bondage.

It should be noted for instance, that women's bodies would be required as sources of ova and of wombs for gestation of cloned individuals (whether they are allowed to develop to term, or sacrificed at some stage). A person cannot be isolated from her body, and therefore the "use" of a woman's body is an exploitation of her whole person. Further, not every man who wishes to be cloned or clone a fetus for spare parts may find a woman willing to provide an ovum or uterus to him on an altruistic basis. There is a real danger of the commodification of women's bodies, with (poor) women being paid to undergo superovulatory drug treatment so that many eggs can be harvested from them (a procedure not without risk, and which has been likened to the farming of human hens), or to act as gestational mothers. Another group of potential egg donors could be women in IVF programs, whose consent to donation may be subtly coerced as a condition of continuing in the program. Both these possibilities raise serious justice issues.

The issue of coercion is also relevant when considering cloning of embryonic stem cells for therapeutic purposes. These cells would be derived from "spare embryos" donated by couples in IVF treatment programmes. Their consent would be required, but measures should be in place to ensure that this consent was genuinely free and not influenced by a desire to please or reward the treatment team.

Particular issues in "therapeutic cloning"

Using the language of ES cell lines serves to mask the fact that the earliest form of human embryo, the blastocyst, must be destroyed in order to obtain these ES cells, which are extracted from the inner cell mass. Another potential source of ES cells (sometimes called EG cells to designate their origin) is the primordial germ cells of aborted (either spontaneously or induced) foetuses. This means we cannot avoid some aspects of the abortion debate: does human life from conception have the same moral status and entitlement to protection as any other human being, and if not, how good a reason is required to justify the sacrifice of the earliest form of human life? One does not need to adopt the view that the early embryo has the same moral status as a developed human being, to nevertheless deny that it has no moral status and is not entitled to any protection or any respect.

Moral complicity

The fact that the embryos sacrificed to obtain ES cells might be "spares" produced in the course of IVF, which would have been destroyed anyway, and the possibility of using germ cells from foetuses which have been deliberately aborted raises the question of complicity in evil. Is it possible or permissible to derive good from evil? It can be argued that if the destruction of a blastocyst, embryo or foetus is a moral evil, any benefit deriving will be tainted with the original evil. However, a similar argument could be made in relation to the transplantation of organs from car accident or suicide victims (Jones 1995). But it is recognised that there is a significant moral difference between benefiting from another's death which occurs accidentally, or even by that person's own hand, and benefiting from a death to which one has contributed (or someone else) with the specific intention of deriving that benefit.

We wish to raise the question therefore, of whether it is right that so many "spare" embryos are created, and whether ES cell technology might not contribute in the future to their production. In other words, the requirement for embryos as a source of ES cells might influence the number which are created in the course of IVF programmes. **It seems that there is a sig-**

nificant distinction between using existing embryos or foetuses which, for other reasons, are not destined to develop into human beings, and deliberately creating such early humans with the intention of sacrificing them.

What kind of society?

Consequentialist ethics, the language of harms and benefits prevails in Australia, particularly in relation to "therapeutic" cloning. "The change of focus from reproductive cloning to therapeutic or spare part cloning has brought a return to consequentialist ways among ethicists and policy makers. This is no way diminishes the moral anxiety of those who disapprove of cloning humans.....(but) (w)ith thinking now directed towards the promise of medical benefits the consequentialist arguments seem to be coming up trumps" (Klotzko 1999 p.52).

We would want to assert that there are some things which it is not decent to do, no matter how great the benefit, or how minor the harms seem. The things we do shape our moral character both individually and as a society. What kind of society sacrifices some of its youngest and most vulnerable members in order to benefit the health of other members? We would challenge our society's idolatry of health and long life- an idolatry which is prepared to sacrifice almost anything on the altar of health and long life.

Therefore we would recommend against any relaxation of current regulations in relation to embryo destruction and research. We would also recommend that, if development of and research on embryonic stem cells is to occur, steps be taken to minimise the number of human embryos which are destroyed in the process.

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