Questions

• Should a body such as the UN push for an international ban on human cloning?

• Should a distinction be made between ‘therapeutic’ cloning (where the embryo is only allowed to develop for a few days) and ‘reproductive’ cloning (where the intention is that a fully formed baby is produced)?

• Would human cloning always be wrong? Could there ever be a reason to allow people to be cloned?

• Is cloning people any different from cloning animals such as cows or dogs?

• ‘We are all unique in God’s eyes’; ‘People are more than simply their genes’. We know from work with animals that clones often have different temperaments or ‘personalities’, so would a clone really be just a ‘carbon copy’ of their ‘parent’?

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SRT Project, Church and Society Council
121 George Street, Edinburgh EH2 4YN
Tel: 0131 240 2267
Email: srtp@cofscotland.org.uk
Website: www.srtp.org.uk

Scottish Charity Number: SC011353
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www.churchofscotland.org.uk
What is Cloning?

The word ‘clone’ comes from a Greek word for taking a cutting from a plant. To clone is simply to make an exact genetic copy of an existing organism. It happens naturally in many plants (if you bury a potato it makes clones of itself), and even in a few animals. But it does not normally happen in mammals and humans, except for ‘identical’ twins (which, as we shall see, is very different from cloning when it comes to the ethical aspects). Dolly was a biological revolution – a sheep created by taking cells from the udder of an ewe and reprogramming them to generate a new embryo, which was implanted in another ewe. It had been thought impossible to grow a mammal from body tissue. But if this ‘nuclear transfer’ cloning was possible in sheep (and now in many other animals), could it be done in humans? And if it could be, should it be?

What are the ethical objections to cloning human beings?

The overwhelming reaction from most people was that it should not be done, but many feared that someone might try. Statements opposing cloning human beings have issued from numerous national and international organisations, including the UN, the Council of Europe, the European Parliament, the European Commission’s ethical advisors, the UK Human Fertilisation and Embryology Authority; many professional medical bodies; and also the scientists at Roslin who cloned Dolly. The UK and many other Governments have now banned reproductive cloning. But what exactly is wrong with human cloning? It is not enough to say that it is unnatural; much medical treatment is also unnatural. The key question is should we respect a biological distinction or celebrate our God-given capacity to override it? Four basic reasons have emerged: control, instrumental use of others, risk and relationships.

Control and Instrumentality

In one sense, cloning runs counter to the evolutionary need to maintain a level of genetic diversity, and to the variety God has created in nature. But we don’t regard ‘identical’ twins as any less human for being genetically the same. We often say how different each is, because humans are far more than just genes. But the mere existence of such twins does not justify the practice of cloning. Ethically, twinning and cloning are very different. When an embryo splits spontaneously to make two genetically identical twin babies, their genetic composition is new, never existing before. It is random, uncontrolled. Cloning would select the genetic composition of an existing person and try and make another individual with the same genes. It is an intentional, controlled act to produce a specific, known end. Not only is the clone born with someone else’s genes, but a third party has predetermined what his or her genetic make up shall be. This control is an inevitable result of cloning. The most basic ethical case against human cloning is that no human being should have their complete genetic make up pre-determined by another human. Of course, parents influence their children in numerous ways socially, and children can accept or reject these influences, but they cannot change their genes. And in most speculated uses of cloning, the clone would not be created for its own benefit but for another’s. This is too instrumental: humans are more than means to someone else’s ends.

Risk and Relationships

To clone one member of a couple to solve infertility would not only be instrumental, but would also raise other profound problems. No one knows the psychological effects of discovering one was the twin of one of one’s parents, biologically the child of one’s grandparents. Would I feel I’m not really me but a ‘copy’ of someone else? What would be my relationship to them? Since we have no sure way of knowing in advance, we surely do not have the right knowingly to inflict that risk on another person.

Lastly there is the physical risk, in the light of the animal cloning experience. Major pregnancy difficulties are often a feature of cloning in sheep and cattle. Cloned mice have been found to die younger. Much of the basic science of nuclear transfer is still uncertain. No one knows how to guarantee that the cell reprogramming process would not lead to serious abnormalities in the offspring or danger to the mother. To translate such risks into humans would be utterly unethical medically. In each different species, cloning is a first of a kind. No matter what advances were made in animal cloning,