

Calls for human cloning ban 'stem from ignorance'

[PARIS] The recent flood of calls for an international ban on the use of human cloning techniques for reproduction appear, at least in some quarters, to be slowly giving way to recognition that such practices may be justified in certain circumstances.

There is also a growing feeling that advocates of a ban have so far failed adequately to substantiate their claims that cloning would be either harmful or unethical.

A report published this month by a working group on cloning set up by the World Health Organization (WHO), for example, argues that much of the opposition to human cloning stems from "science fiction accounts" which have resulted in "fear and ignorance on the part of the public".

The report says that this has prompted legislators and other policy-makers to act from 'moral panic' rather than considered deliberation. It says that the cloning debate involves many issues that still need to be discussed in detail, and concludes that introducing an immediate international ban on cloning would be "unwise and counter-productive".

The report adds that a ban or moratorium may be "most incautious", as a hasty prohibition could result in loss of actual and potential benefits. But its conclusion that WHO should proceed more carefully appears to have gone unheeded by the organization's General Assembly, a political body representing WHO's member states. Last week, the assembly adopted a resolution affirming that "the use of cloning for the replication of human individuals is ethically unacceptable and contrary to human integrity and morality".

The assembly's resolution follows similar calls for an international ban from political leaders such as Jacques Chirac, the French president, and Jürgen Rüttgers, Germany's research minister (see *Nature* 387, 111; 1997). Such opposition appears to be based on a perception that the benefits of human cloning would be few, whereas the risks of abuse could be large. But critics argue that the benefits are being underestimated and the risks overstated.

"A sense of proportion is needed," says David Shapiro, executive secretary of the UK Nuffield Council on Bioethics, who points out that there is plenty of time for debate, given the enormous technical hurdles to be overcome before human cloning could even be authorized on safety grounds.

Any demand for cloning would also be relatively small and could be tightly regulated, predicts Shapiro, arguing that, from an ethical point of view, the technique is not

significantly different from many accepted forms of medically assisted procreation.

John Robertson, professor of law at the University of Texas in Austin, last week told a meeting of the International Bioethics Committee of the United Nations Educational, Scientific, and Cultural Organization that "initial repugnance has given way to the recognition that there may be some benefits to infertile couples and others from human cloning".

He added that there was also a growing awareness that "the harms alleged to flow from cloning are too vague and speculative to justify a ban on all possible uses of cloning or on cloning research".

Indeed, the widespread political opposition to cloning is causing concern among many scientists and bioethicists. Considered discussion is falling victim to emotion and politics, says Giuseppe Benagiano, director of WHO's programme on research on human reproduction.

"The president or prime minister stands up and says you have to ban human cloning; everybody applauds, he gets more votes, and the arguments play no role," says Benagiano. The fact that the assembly also requested WHO to assess fully the ethical, scientific and social implications of human cloning is "the only thing that is keeping the door open", he adds.

David Griffin, the secretary of WHO's

working group on cloning, says the arguments are highly complex, while attitudes to applications of human cloning differ widely between cultures. He argues that a "lack of information" has obscured the debate.

The WHO report points out, for example, that while producing a cloned twin child for spare organs and tissues would clearly be ethically unacceptable, individuals in some cultures might not object to producing clones of early human embryos as a source of spare parts — via the production of embryonic stem cells, perhaps (see *Nature* 387, 218).

Infertile couples are also likely to be a source of demand for cloning. In couples where both partners lack gametes, cloning could provide an alternative to the current practice of embryo donation. It could also be used by couples where the male partner lacks gametes, as it might be considered preferable to using sperm from donors.

Couples undergoing *in vitro* fertilization may also wish to use cloning to generate extra embryos and increase the chances of fertilization in cases where the female partner has few oocytes. Robertson recently told a panel of the US National Bioethics Advisory Commission that if this was essential to reproducing, the couple might have a legal right to the technique under US law, as it would fall under the fundamental freedom to reproduce.

Robertson argues that for most realistic applications of cloning, it is "difficult to see harm for either children, families or society". A ban on cloning for reproduction or on research that might lead to it, "is imprudent and unjustified," he asserts. "Science fiction should not guide science policy." **Declan Butler**

Unesco bioethics experts query their remit

[PARIS] Members of the International Bioethics Committee of the United Nations Educational, Scientific and Cultural Organization (Unesco) appear to be divided on the issue of human cloning, on which they are due to produce an interim statement this week.

In particular, many are unhappy about the remit given to the committee by Federico Mayor, director general of the agency, to check whether Unesco's draft "universal declaration on the human genome and human rights" outlaws cloning. Some are also dismayed that Mayor has publicly declared that humans "should not be

cloned" in any circumstances. "It would have been better if Unesco and the director general had waited," says one committee member.

In addition, many members feel that the remit and Mayor's declaration have already tied its hands unnecessarily, arguing that they would have preferred to have carried out a broad assessment of the issues raised by cloning. And several question the wisdom of a ban on human cloning (see above). Some committee members feel it is unlikely that the declaration explicitly bans human cloning as it stands, while several also argue that in any case the proposed declaration is about human

rights and not about specific applications.

Noëlle Lenoir, the committee's chairwoman, has previously stated that the declaration "stops short of including detailed provisions governing medical and research practices [such as genetic tests or gene therapy] on the grounds that doing so would be inappropriate and unworkable within an international context".

Many committee members are also opposed to amending the declaration to ban human cloning explicitly. They fear that tinkering with the declaration risks unravelling the four years of international negotiations it involved. **D.B.**