

Human Fertilisation and Embryology Bill

The 1967 Abortion Act has led to 6.8 million abortions. The 1990 Human Fertilisation and Embryology Act provided for various forms of assisted conception, but through allowing embryo freezing, research and disposal up to 14 days has also destroyed 2.2 million human embryos - a total of nine million early human lives in 40 years.

The 2008 Human Fertilisation and Embryology Bill goes further by bringing in more liberal embryo research, saviour siblings, animal-human hybrids, fatherless IVF children, and by making legal without explicit consent the use of tissue from children, mentally incapacitated adults and people who have died, in order to make cloned and hybrid embryos.

All attempts to remove these provisions from the bill, or to legalise them only when alternative research routes did not exist, were defeated in both Lords and Commons as government Peers and MPs faced a three line whip. Most would have voted this way regardless, due to a successful propaganda campaign by the *Times*, backed by various scientific institutions, patient interest groups and MPs.

The Prime Minister was key when he wrote in May to support embryonic stem cell therapy and animal-human hybrid research, despite scientists worldwide turning to the ethical alternatives of adult and cord blood stem cells and induced pluripotent stem cells.

The bill completed its eleven month journey through Parliament on 29 October with a debate in the Lords and now needs only royal assent, a mere formality, to make it law. The only saving

grace has been that the abortion law has not been further liberalised. It was a huge answer to prayer when liberalising amendments calling for abortion on request up to 24 weeks, nurse and GP surgery abortion, and extension to Northern Ireland fell. At the eleventh hour the government acted to prevent debate on these. The new HFE Act is certainly bad, but could have been even worse. (*services.parliament.uk* 2008; November, *guardian.co.uk* 2008; 18 May, *news.bbc.co.uk* 2008; 22 October)

one stop embryo test

Current tests for inherited diseases are specific; they can only identify a few hundred conditions. A 'one stop' gene mapping test may be available soon. It will tell parents if embryos are affected by almost any of 15,000 inherited diseases.

The test involves removing one cell from an eight-day-old embryo, created by IVF. The family's genetic map is produced using DNA samples from the parents, grandparents and often a relative affected by a specific condition. If a block of DNA has been passed on by the paternal grandfather to the affected relative, the test can determine whether this block is also present in the embryo.

The test is currently being trialled. If a licence is granted from the Human Fertilisation and Embryology Authority, this would set a worrying new horizon for pre-implantation genetic diagnosis. Furthermore, the test could potentially generate genetic profiles, indicating susceptibility to conditions such as heart disease and cancer. 'But obviously, the ethical question is, if you can screen for anything, where do you draw the line?' says Dr Mark Hamilton, chairman of the British Fertility Society. (*news.bbc.co.uk* 2008; 24 October)

genetically uncommitted?

A gene variation may contribute to commitment problems in men, according to a study from the Karolinska Institute in Sweden. Interest in the role of vasopressin (ADH) in human sexual behaviour arose after the discovery that variations in ADH receptor expression make prairie voles monogamous but meadow voles promiscuous.

The recent study looked at the gene coding for an ADH receptor, in 552 Swedes in heterosexual relationships lasting at least five years. Variation of the RS3 334 section of the gene was related to how well men bonded with their partners. Those with two copies (rather than one or none) were more likely to be unmarried than the others, and if married, they were twice as likely to have a marital crisis.

It is not yet clear how this polymorphism affects ADH receptor expression and consequently our intimate relationships. But unlike voles, human capacity for moral behaviour enables us to exercise choice no matter what our biological predispositions. (*New Scientist* 2008; 1 September, *Proc Natl Acad Sci USA* 2008;105:14153-6, *Emory Report* 1999; 7 September)

physician assisted suicide

Debbie Purdy, wheelchair-bound with primary progressive multiple sclerosis, may want to die at Dignitas (the Swiss assisted suicide facility) at some point. She believes the law is unclear and worries that her husband will be prosecuted if he accompanies her (around 100 Britons are thought to have committed PAS at Dignitas, and so far, none of their relatives have been prosecuted for assisting a suicide).

In October, High Court judges sat for a judicial review and decided that the law is enough. Mrs Purdy, a member of Dignity in Dying (formerly the Voluntary Euthanasia Society), which campaigns for the legalisation of PAS and euthanasia in the UK, is said to be appealing the decision.

Now though, the Crown Prosecution Service is considering whether to prosecute the parents of Daniel James, a 23 year old paralysed last year when a rugby scrum collapsed. His parents took him to Dignitas in September this year, where he died. Unlike most British patients choosing to die in Switzerland, Daniel was young and his condition, though distressing, was neither progressive nor terminal.

(www.carenotkilling.org.uk)

the credit crisis and health

The UK government's multi-billion pound bailout will inevitably leave the nation in debt. But the NHS should face little danger in the immediate future. NHS spending is guaranteed up to April 2011, but the long term effects will depend on the length of the credit crisis and the aftermath.

Tax raises and funding cut-backs, in an attempt to recoup borrowed money, may lead to a reduced workforce and increased poverty. Health services available to patients may decrease. Private sector suppliers may be affected and private finance initiative schemes may undergo re-evaluation.

The global impact of the credit crisis is predicted to leave 44 million more people malnourished in 2008 as a result of increased food and fuel prices. The Millennium Development Goals seem even less likely to be fulfilled by the target of 2015. (*BMJ* 2008;337:2259, *Lancet* 2008;372:1520)

placebo prescriptions are rife

Over half of US GPs and rheumatologists admitted prescribing 'placebo treatments' to some of their patients, in a recent survey. More than 62% believed this was ethical. They rarely called these treatments 'placebos', instead referring to them as 'a potentially beneficial medicine or treatment not typically used for their condition'. However, a 2006 American Medical Association statement reads, 'Physicians may use placebo for diagnosis or treatment only if the patient is informed of and agrees to its use'.

Most placebos were innocuous vitamins and over the counter analgesics, but antibiotics and sedatives were also prescribed by 13% of doctors surveyed. The use of placebo treatments remains a controversial topic for ethical and policy debates. While it may be physically beneficial for patients, this practice is paternalistic and jeopardises patient trust. (*medicalnewstoday.com* 2008; 25 October)

religion, pain and depression

Two recent studies explore the link between religion and health. The first, from Oxford University, addressed pain perception. When Catholics and 'non-believers' were subjected to electric shocks, Catholics experienced 12% less pain than the group of atheists and agnostics when viewing an image of the Virgin Mary. Brain scans showed that the ventrolateral prefrontal cortex was more active in Catholics. They engaged a 'brain mechanism that is well known from research into the placebo effect, analgesia and emotional disengagement', said the lead researcher. It 'helps people to reinterpret pain, and make it less threatening.'

An American study looked at religiosity and the risk of depression. Individuals with a higher level of religious well-being were 1.5 times more likely to have had depression than those with lower levels of religious well-being. The authors, surprised by the findings, suggested that this could be due to people with depression using religion as a coping mechanism. Consequently, depression is linked to praying more. (*guardian.co.uk* 2008; 1 October, *medicalnewstoday* 2008; 24 October)

evolution is complete?

Human evolution remains a controversial theory. But for those who believe it, it may be coming to an end in humans for three reasons, according to Steve Jones, Professor of Genetics at University College London. 'In ancient times half our children would have died by the age of 20. Now, in the Western world, 98% of them are surviving to the age of 21...Natural selection no longer has death as a handy tool.'

Secondly, there is less potential for random alterations to our genetic blueprint. '...The mean age of male reproduction means that most conceive no children after the age of 35,' said Professor Jones. 'Fewer older fathers means that if anything, mutation is going down.'

Thirdly, 'Small populations which are isolated can...evolve at random as genes are accidentally lost. Worldwide, all populations are becoming connected and the opportunity for random change is dwindling.' (*independent.co.uk* 2008; 7 October, *telegraph.co.uk* 2008; 7 October)

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