Update on Life Issues - November 2021

Abortion

Texas Heartbeat Act

Currently, there is only one big bioethical story – the new Texas abortion law. It has provoked newspaper articles and letters, TV programmes, court hearings, debates, website hacking, marches, fights and much more. It is the culmination of 48 years of campaigning. In 1973, the US Supreme Court ruled, in the case of *Roe v. Wade*, that a woman had the constitutional right to an abortion before viability of her unborn, namely at about 24 weeks. To call it a contentious ruling would be a gross underestimate.

So, for almost five decades, the US pro-life constituency has been pressing for repeal, or at least some limitation, of this abortion legislation. For instance, in July 2013, the first Texas foetal heartbeat bill (HB 1500) was introduced by Phil King, a member of the Texas House of Representatives. However, the bill was never passed. Now, in 2021, a more serious challenge has finally emerged.

On 11 March 2021, the Texas Heartbeat Act (Senate Bill 8, SB8) was introduced into the Lone Star State legislature by Senator Bryan Hughes. After debates and votes in both the Texas Senate and House, it was signed into law by the Texas Governor, Greg Abbott, on 19 May. And it came into effect on 1 September. This highly-restrictive Act has banned abortion throughout Texas after six weeks of a pregnancy, that is, after the detection of a foetal heartbeat. It makes an exception for a medical emergency, but not for cases of rape or incest.

Pro-abortion healthcare workers and women's groups have criticised it because of its earliness of 6 weeks, problems associated with cardiac activity detection, its intrusion into women's rights, its disproportionate effect on black and low-income women and those who live far from abortion facilities, and so on. Yet the Act was democratically passed by members of both the Texas Senate and House, for instance, in the latter by 81 to 63.

Enraged, abortion providers, such as Planned Parenthood, and rights groups, such as the American Civil Liberties Union (ACLU), asked the Supreme Court on 30 August to intervene and issue an emergency block on the legislation. The Supreme Court, with its 6-3 conservative majority, cited procedural issues and turned down the request, acknowledging that aspects of the Heartbeat Act would continue to be challenged in the lower courts. So on 1 September, the Act came into effect. And because an estimated 85% of Texan abortions are performed after six weeks, access to almost all abortions in Texas has since been denied.

President Joe Biden has criticised the Act, calling it 'extreme' and saying it 'blatantly violates the constitutional right established under *Roe v. Wade*'. The Biden administration announced it plans to sue Texas on the basis that the Act 'illegally interferes with federal interests'.

Accordingly on 9 September, the US Justice Department went to court arguing that the Act was unconstitutional. On 6 October, Judge Robert L Pitman issued an order blocking the Act. He called it 'flagrantly unconstitutional' and a violation of *Roe v. Wade*. The Judge said he would 'not sanction one more day of this offensive deprivation of such an important right'. However, on 8 October, the US Fifth Circuit Court of Appeals put an administrative stay on Pitman's order. As a consequence, most abortions in Texas remain illegal.

Meanwhile, the US Supreme Court declined to intervene and hence the Texas law remained temporarily in effect, but the Court unusually heard legal arguments on 1 November. In a three-hour meeting, the Justices were asked to decide whether Texas abortion providers and the Department of Justice – in effect the Biden administration – are allowed to contest the state's new Act. One of their arguments is that the law was drafted in such a way as to evade legal review in federal courts. It is thought that a decision from the Supreme Court may come before the end of November and that it will allow the lawsuit of the abortion providers, but not that the Department of Justice, to proceed. That would be before the Mississippi court arguments begin on 1 December (see below). In the meantime, abortions in Texas have fallen by 50% since the law went into effect on 1 September.

A novel feature of the Act is that it allows 'a private right of civil action' so any private citizen can sue anyone who 'aids and abets' an illegal abortion. Thus, an ordinary American, from Texas or elsewhere, can seek a minimum of $10,000 (£7,200) in damages in a civil lawsuit against abortion providers and doctors and anyone else, maybe clinic staff, family members or clergy, who support the abortion. Opponents have called this 'a bounty-hunting scheme'.

On 20 July, with the prospect that the Supreme Court's consideration of *Dobbs v. Jackson Women's Health Organization* could overturn the colossus of *Roe v. Wade*, Governor Abbott signed the so-called Abortion Trigger Bill. This proactive 'trigger' law would take effect after 30 days if *Roe v. Wade* were overturned, or if a court ruling or amendment allowed states individually to prohibit abortions. The Bill would prospectively ban all abortions in Texas, without exemption, beginning from fertilisation. Texas has therefore joined at least 10 other US states which have already passed similar measures. These would allow each state to devise its own abortion laws and would in effect protect all unborn children from abortion.

And what does the great American public make of all this? Is Texas different from the other 49 states? When a Pew Research Center poll asked about abortion, the overall US figure was that 59% agreed it should be legal in all/most cases. On the other hand, the equivalent figure from Texas folk was only 45%. Moreover, another poll conducted in April found that nearly half of the state's voters supported a six-week ban on abortions. In other words, Texas is fundamentally a pro-life state.

Dobbs v. Jackson Women's Health Organization

In the shadow of the novel and contentious Texas Heartbeat Act and its six-week ban of abortion sits *Dobbs v. Jackson Women's Health Organization*. The Supreme Court will hear this challenge to Mississippi's law that bans almost all abortions after the 15th week of pregnancy. The hearing is due to start on Wednesday 1 December. Judgement is expected in the Summer of 2022.

Lynn Fitch, the Mississippi Attorney General, has said that she is looking forward to the opportunity to convince the Court that there is no constitutional right to abortion and that *Roe v. Wade* should be overturned. This is a big and bold case. Abortion in America is in flux.

Euthanasia and Assisted Suicide

Assisted Dying Bill [HL]

Friday 22 October was another dreary, even dreadful, day for the 'morally sensitive'. It was the day that Baroness (Molly) Meacher's Assisted Dying Bill received its Second Reading in the House of Lords. The Bill would allow for someone, who is terminally ill and expected to die within six months, to request and be provided with a lethal prescription of assisted suicide drugs, following assessment by two doctors and approval from the High Court. It read like a draft from the Dignity in Dying organisation, formerly the Voluntary Euthanasia Society – after all, the Baroness is its current chairwoman.

The event started at 10.09 am and the House adjourned at 5.56 pm, so it lasted almost 8 hours. It was not really a debate since no-one was questioned. Instead, it consisted of roughly 3-minute speeches for and against the Bill's proposals. Listening was hard work – some speeches were good, some bad, many repetitious. On balance, they seemed to be about 50 – 50 pro and con. Probably none of them changed anyone's mind.

There was far too much anecdotal stuff. Peer after peer was eager to recount the frightful death of a relative or constituent in pain and misery. Where was the ethical approach to such a great subject? Are we now to be governed by feelings rather than principles? The one welcome theme was praise for the wonders of palliative care and the common call for its improved funding, though this is often a ploy used by pro-euthanasiasts to demonstrate their broadmindedness and integrity.

There were two personal highlights. One came from the astute Lord Carlile of Berriew. He questioned why, on their fourth attempt, had the Bill's supporters not yet dealt with previous holes in the safeguards. Furthermore, he pointed out that 'Clause 1 requires the consent of the Family Division of the High Court before suicide can be assisted.' And, 'Have the judges been asked? There are but 20 Family Division judges.' He proposed a calculation. 'Let us suppose that 25% of those judges objected to the jurisdiction on grounds of conscience … and that there were 1,000 cases a year.' And 'Each case would be bound to take two or three days before the court. In a sentence, the Family Division would be swamped by those cases.' 'In my view, parliamentary Bills founded on such fragile safeguarding and analysis, especially after years of trying to produce acceptable safeguards, should really not be troubling your Lordships' House.' True, Baroness Meacher later replied that, 'The High Court has been consulted.' However, Lord Carlile's overload problem remains.

The second highlight came from the amiable Lord Winston. Concerning misunderstandings about the Bill, he said, 'It raises the most important moral question and needs clarity without euphemism. "Assisted dying" could equally be applied to palliative care, so the Bill's title does not represent what is really intended. The word "euthanasia" – from the Greek "eu", meaning well or good, and "thanatos", meaning death – is what we are actually talking about.' He wished to amend the motion by adding, 'but that this House considers that the bill should refer to euthanasia rather than assisted dying.' He later withdrew this on 'the convention of the House … that we do not move amendments at the end of a Second Reading.' Yet Lord Winston had made a serious point. Many think that 'assisted suicide' would be a more precise title for the Bill rather than 'assisted dying', which is a good description of the work of palliative care.

In the end, there was no vote. This does not indicate a victory for the Bill's supporters, rather it is a Second Reading procedural convention. Hansard simply recorded, *'Bill read a second time and committed to a Committee of the Whole House.'* There it will be scrutinised line by line, with amendments discussed and voted upon. When that will occur is currently unknown. Because it is a

Private Member's Bill, it would need government time to pass to the House of Commons and through its various Stages there. This currently seems unlikely. It is understood that the Prime Minister, Boris Johnson, would oppose any assisted suicide legislation. Similarly, the Health Secretary, Sajid Javid, is 'understood to have made clear to friends that he does not intend to vote to relax the law'.

The history of assisted suicide legislation in the UK has been one of chipping away. The 1961 Suicide Act stands as the robust statute, decriminalising suicide and so protecting the vulnerable, but punishing anyone who assists. Since 2003, several attempts have been made with increasingly revised bills to amend the Act – all have failed. The last attempt in the House of Commons was in 2015 by Rob Marris MP – it too failed by 330 votes to 118.

This issue will not go away. We will again have to rehearse that assisted suicide legislation is unnecessary and dangerous. And again, we will have to prepare those slippery slope arguments. For instance, on the basis of the outcomes in jurisdictions where it is lawful, the stipulation of six months will soon be increased, other safeguards will be breached, eligibility criteria will be widened, patients with non-terminal illnesses will qualify, the vulnerable will be pursued, healthcare professions will be divided, doctor-patient relationships will be riven, substandard end-of-life care will be normalised, and the entire medico-legal framework of UK society will be changed for ever, for the worse.

The UK needs to legalise assisted suicide like the proverbial hole in the head.

Assisted Dying for Terminally Ill Adults (Scotland) Bill

Yet another Scottish assisted suicide proposal has been lodged at the Scottish Parliament. The proposer is Liam McArthur, MSP for the Orkney Islands, and a member of the Scottish Liberal Democrats.

The Bill, technically only a draft proposal, would enable competent Scottish adults, who are terminally ill, to be provided at their request with assistance to end their life. Currently, a consultation period is underway. This is due to end on 22 December 2021, then the responses will be analysed and a final proposal presented to the Scottish Parliament as a Member's Bill. This may take months, perhaps even two years.

All the usual failings of such legislation are present in this proposal – patient vulnerability, slippery slopes, lack of safeguards, and so on. And there is a novel feature. It suggests that patients who are unable to travel due to terminal illness, or people living in small and remote communities, might be excused personal attendance with the required two independent doctors and instead be assessed by remote consultations, such as telemedicine, before being granted help to commit suicide by lethal drugs sent in the mail. It will be a sort of death via Zoom and post.

Scotland's First Minister, Nicola Sturgeon, has spoken out against proposals to legalise assisted suicide citing fears about safeguards. Speaking before the previous Scottish debate on the issue in 2015, she said, 'I voted against it last time and I haven't been convinced of assisted suicide this time either. A major stumbling block is the issue of sufficient safeguards. I believe we should support people to live and I am therefore in favour of good quality palliative care.'

Since Scottish devolution in 1999, there have been several failed attempts to bring the issue onto the statute book. The most recent, in 2015, was proposed by Patrick Harvie, the Green MSP for Glasgow. It fell by 82 votes to 36.

Genetic Technologies

Brain organoids with eyes

Here comes another clash between scientific progress and conservative, orthodox bioethics. The culprit is a paper by Elke Gabriel *et al.,* entitled, 'Human brain organoids assemble functionally integrated bilateral optic vesicles' published in *Cell Stem Cell* (2021, **28**: 1740-1757).

This controversial work used 16 batches taken from four donors of human induced pluripotent stem cells (iPSCs) to create 314 brain organoids, 72% of which formed a primitive eye structure called an optic cup. The method is therefore considered to be reproducible. These structures contained lens and corneal tissue and they responded to light and exhibited connections between the retina and regions of the brain. It was around day 30 that these brain organoids attempted to assemble optic vesicles, which developed progressively as visible structures within 60 days, similar to the rates recorded in normal human embryo development.

According to the team leader, Jay Gopalakrishnan of University Hospital Düsseldorf, 'Our work highlights the remarkable ability of brain organoids to generate primitive sensory structures that are light sensitive and harbour cell types similar to those found in the body.' And 'These organoids can help to study brain-eye interactions during embryo development, model congenital retinal disorders, and generate patient-specific retinal cell types for personalized drug testing and transplantation therapies.' That is a concise, Teutonic-like description of the work.

Many critics are less prosaic. They ask, whether there should be limits on growing human embryo-like structures which are becoming increasingly complex. For example, Paul Knoepfler of the University of California Davis School of Medicine is mildly concerned. He has written, 'As to the human embryo models that are starting to be so similar to actual human embryos, I think limits make sense. For human brain organoids not so much. These structures are fairly far removed from actual human brains and reports of neural activity in them don't show anything like coherent function on a consistent basis.'

Here is a more bioethically-conservative perspective. Of course, developments like these can assist in the study of inherited eye disorders, drug testing, transplant therapies, and so on. But here is human brain tissue, albeit primitive. Yet this is exactly how human embryos develop, from undifferentiated stem cells to differentiated tissues and organs. What next? The Düsseldorf team already wants to extend the viability of these organoids to allow the development of more mature eye structures.

This and other examples of controversial human research, such as three-parent embryos, human-animal hybrids and embryonic stem-cell technologies, test bioethical boundaries. The problem is that such restrictions have a habit of being legally extended or criminally breached. Consider the current pressure to lengthen the 14-day rule for human embryo experimentation, or the global prohibition on human germline gene editing until the 2018 scandal of He Jiankui.

Experiments on non-embryos, such as brain organoids, throw a spanner in the bioethical works. Of course, such structures cannot become human beings, yet they look like the products of human development. At the least there is the yuck factor. And again, how closely must such embryo-like structures resemble natural embryos before they too are considered human?

Be warned, slippery slopes exist. This year's brain organoid may become a little more brain-like next

year, and ad infinitum. There are some areas of research that should be halted and remain closed for ever. Is this one? Perhaps not yet, but in the future, probably yes.

Stem-cell Technologies

Ageing, bones and stem cells

Your body is full of biological surprises. For example, it started with just one cell, a zygote. And as you age it still fascinates. For example, think bones. As you get older your bone mass becomes less and your skeleton becomes more fragile. Such changes are hugely complex and involve a myriad of molecular and cellular processes. Besides ageing, post-menopausal women experience an additional route of bone loss associated with their declining levels of oestrogen.

Bones, like all other body parts, are constantly turning over. That is, their cells are simultaneously dying and renewing so that new material is replacing the old. In bones, this dual process of accretion and resorption is driven primarily by skeletal stem cells (SSCs) affecting the opposing actions of osteoblasts (accretion) and osteoclasts (resorption). Ageing brings about changes in the function of SSCs, which alters the balance of turnover of bone and hence its mass.

Recent experiments with mice have clarified the role of SSCs in the dynamics of this bone turnover. Thomas Ambrosi and colleagues at Stanford University School of Medicine, examined the effects of intrinsic ageing-driven changes in these SSCs as opposed to environmentally-driven changes. They removed SSCs from the bones of young (2-month-old) and aged (24-month-old) mice. These SSCs were transplanted into young recipient mice, in which the transplants formed small masses of bone tissue.

Two key differences between young and aged SSCs were reported. First, the bone mass produced by aged SSCs was much smaller than that produced by young SSCs. Second, aged SSCs exhibited an increased ability to promote the formation of osteoclasts, the blood-derived cell type responsible for bone resorption. Ageing therefore limits the ability of SSCs to maintain a healthy flux between bone accretion and bone resorption – so bone mass declines. Such insights into the complexities of bone ageing may suggest treatments for problems, such as loss of skeletal integrity, fracture healing and osteoporosis.

This work was reported as, ‘Aged skeletal stem cells generate an inflammatory degenerative niche’ by Thomas Ambrosi *et al.,* in *Nature* (2021, **597**: 256-262).

Miscellaneous

Nuala Scarisbrick (1939 – 2021)

In 1970, Nuala and Jack Scarisbrick co-founded LIFE – Save the Unborn Child. It was to become the largest and most influential pro-life charity in the UK. Informed by their Roman Catholic faith and influenced by some of their friends, they had come to realise that the 1967 Abortion Act was an iniquitous piece of legislation and that they had to do something to counter its adverse effects. They were adamant that declaring to be against abortion was not enough – positive, practical alternatives were needed. There could be no circumstances that justified aborting an unborn child.

Consequently, Life took an absolutist stance. Thousands and thousands of women and their children are thankful that the Scarisbricks and Life have supported and defended them through difficult and unexpected pregnancies.

In the early days, Nuala and Jack were caring for pregnant girls by taking them into their own home. While Jack became the figurehead of the new charity, it was Nuala who oversaw the day-to-day running of Life. For 30 years, she took on the full-time but unpaid position of National Administrator. Jack described her as Life's 'chief animator'. The husband-and-wife team became the dynamic duo who drove the charity until they stepped down from their leadership roles in 2017.

And how thankful many of us are to have known Nuala, for so many years, the châtelaine of Life House, the matriarch of the Life family and the doyenne of all things pro-life. To know her was to admire her – tireless defender of the unborn, formidable organiser, generous hostess, steadfast friend, gifted teacher, wellspring and driver of ideas, fount of fun.

Nuala was a great encourager. In the early 1980s, many of us, educated by the Schaeffer and Koop book and films, entitled *Whatever Happened to the Human Race?* were looking for an outlet to express our new-found pro-life credentials. Nuala cheered us on to form Evangelicals for Life, a specialist grouping within the main organisation. It helped broaden the UK's pro-life constituency so that being anti-abortion was no longer only a Roman Catholic endeavour.

She was also a formidable realist – when we told her we wanted to start the Aberystwyth Life Group, her response was that nonchalant, 'Oh, you want to give it a go do you?' but then reassuringly she drove from Leamington Spa to Aberystwyth to spend a weekend training us in Life education, caring and political advocacy. She was almost Wonder Woman!

Nuala Ann Scarisbrick was born in January 1939. She worked as a teacher, and married the distinguished Tudor expert, Professor John Joseph 'Jack' Scarisbrick in 1965. Their home was in Leamington Spa. They have two daughters, eight grandchildren, and nine great-grandchildren with a tenth due imminently. How we loved her – how we will now miss her. Our heartfelt condolences go to Jack and the family – how especially privileged they were to have known Nuala for decades as wife, mother, grandmother and great-grandmother.

Biological and chronological clocks

How old are you? Some reply with a chronological age. Some say they are only as old as they feel. The better informed declare they are as old as their arteries. Welcome to the inflammatory ageing clock (iAge). This is a new type of 'clock' that can assess chronic inflammation to predict whether someone is at risk of developing age-related disorders, such as cardiovascular and neurodegenerative diseases. The clock measures a person's 'biological age', which takes health into consideration and can therefore be higher or lower than a person's chronological age. Healthy people tend to have a biological age lower than their chronological age.

It has been described in a paper entitled, 'An inflammatory aging clock (iAge) based on deep learning tracks multimorbidity, immunosenescence, frailty and cardiovascular aging' by Nazish Sayed *et al.*, in *Nature Aging* (2021, **1**: 598-615).

The concept behind the iAge is based on the idea that as a person ages, their body experiences chronic, systemic inflammation – their cells become damaged and emit inflammation-causing molecules. This ultimately leads to wear and tear on their tissues and organs. And because people with a healthy immune system will be more able to neutralise this inflammation, they will age more

slowly. In other words, because inflammation is treatable, the iAge tool could help doctors determine who would benefit from medical intervention, such as anti-inflammatory drugs, that should potentially extend the number of years a person lives in good health.

To develop iAge, the team at Stanford University in California analysed blood samples from 1,001 people aged 8 to 96 years old. The researchers used health information and a machine-learning algorithm to identify protein markers in blood that most clearly signalled systemic inflammation. In particular, they pinpointed the immune-signalling protein, or cytokine, CXCL9. It is mainly produced by the inner lining of blood vessels (including arteries!) and has been associated with the development of heart disease.

The researchers tested iAge on a cohort of centenarians. The results showed the volunteers had on average a biological age 40 years younger than their chronological age. This further suggested that people with healthier immune systems tend to live longer. Measuring inflammation with the iAge clock could prove to be a useful predictor of patient health in a clinical setting.

Conscientious objection reversed

Talk about abortion or euthanasia and the issue of conscientious objection is never far away. Not long ago, it was simple. For example, Section 4 of the 1967 Abortion Act protected the ethical stance of healthcare workers by stating that individuals are under no obligation to 'participate in any treatment authorised by [the Act] to which [they have] a conscientious objection'. It has become a highly-contested and poorly-resolved piece of legislation.

Nowadays, it is more commonly argued that doctors have a duty of care to provide legal healthcare services. Take, for example, an article by Kyle Fritz, of the University of Mississippi, in *The American Journal of Bioethics* (2021, **1**: 46-59), entitled 'Unjustified symmetry: Positive Claims of Conscience and Heartbeat Bills.'

Interestingly, the legal code of Fritz's home state, Mississippi, declares, 'A health-care provider may decline to comply with an individual instruction or health-care decision for reasons of conscience.' Fritz argues, quite unconvincingly, that if some doctors are permitted to *withhold* their services on the grounds of conscientious objection, why cannot other doctors *provide* their services for the same reason? He calls the current situation ethically 'asymmetrical'.

Fritz writes, '… one's integrity can be damaged not only by performing an action contrary to one's conscience, but also by not performing an action that one's conscience requires. So, if we should protect negative conscience clauses to protect integrity, we should also protect positive ones for the same reason.'

Fritz's approval is long and complex. The objection is more concise. If an act is deemed legal, say abortion, then a negative conscience clause is a performance of charity. The act can be performed by another. If an act is deemed illegal, say euthanasia, then a positive conscience clause is a performance of unlawfulness. And the law should never encourage that which is illicit.

What would be the outcome of implementing Fritz's thesis? If both negative and positive conscience clauses are allowed, then conscientious objection becomes meaningless.

John Ling