

## TOP BIOETHICS NEWS STORIES: MARCH 2017 – MAY 2017

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**“3 Women Blinded by Unproven Stem Cell Treatments”** by Rob Stein, *NPR*, March 15, 2017

Scientists have long hoped that stem cells might have the power to treat diseases. But it’s always been clear that they could be dangerous too, especially if they’re not used carefully. . . . In one report, researchers document the cases of three elderly women who were blinded after getting stem cells derived from fat tissue at a for-profit clinic in Florida. (<http://tinyurl.com/j8o5jqa>)

**“Texas on Track to Become First State to Explicitly Back Stem Cell Therapies”** by Andrew Joseph, *STAT News*, May 30, 2017

Lawmakers in Austin have approved a bill authorizing unapproved stem cell therapies, putting Texas on track to become the first state to explicitly recognize the experimental treatments. . . . For years, clinics across the country have been offering experimental stem cell therapies for patients with chronic conditions or terminal illnesses, but no state has given them legal validation. Instead, clinics have largely operated under the radar of regulatory authorities, touting treatments for a range of injuries and diseases. (<http://tinyurl.com/y7kg2vc7>)

Adult stem cell therapies have gained traction as possible therapeutics for diseases such as leukemia and other cancers. While some patients in carefully designed trials have seen improvement, others are turning to stem cell therapies not approved by the FDA for everything from macular degeneration to alternatives to Tommy John surgery. Texas’s bill would allow for the use of these unproven therapies, including those for terminal patients. As amended, it would require IRB approval (*Science*, <http://tinyurl.com/y9sg7luw>).

**“Determined Parents Are Moving the Needle on Gene Therapy”** by Emily Mullin, *MIT Technology Review*, March 21, 2017

In recent years, gene therapies have become safer and better at hitting their intended targets in the body, leading to a handful of remarkable cures in clinical trials. Advocates for rare-disease patients . . . are increasingly seeking to start gene-therapy programs. They are establishing patient advocacy organizations, raising money for research, and even founding their own biotechnology startups to find treatments where few or none currently exist. (<http://tinyurl.com/jvnje8t>)

**“‘Right-to-Try’ Laws Expose Dying Patients to Exploitation, Ethicists Warn”** by Carrie Feibel, *Kaiser Health News*, March 6, 2017

In the past three years, 33 U.S. states have passed laws aimed at helping dying people get easier access to experimental treatments. Supporters say these patients are just looking for the “right to try” these treatments. Such laws may sound compassionate, but medical ethicists warn they pose worrisome risks to the health and finances of vulnerable patients. (<http://tinyurl.com/yd7v9smh>)

The use of experimental drugs, devices, and therapies raises several bioethical issues. Gene therapy drugs show promise in some cases, but clinical trial regulators are understandably careful after bad outcomes with experimental gene therapy in the 1990s. Furthermore, while some medical professionals question whether “right-to-try” laws sufficiently protect patients, they are unwilling to speak up for fear of appearing callous toward the patient’s situation.

**“Why Were There Fewer Microcephaly Cases from Zika Last Year?”** by Helen Branswell, *STAT News*, March 29, 2017

Of the many mysteries that remain about the Zika virus and its attack on the Americas, perhaps the most puzzling one relates to the bizarre distribution of babies born with Zika-induced microcephaly. After so many such births were recorded in Northeastern Brazil in the last quarter of 2015, the country—and other places where the virus fanned out to from Brazil—braced themselves for a similar tsunami in 2016. But it didn’t materialize—at least not to the same degree. (<http://tinyurl.com/ycu4w25a>)

In May, Brazil declared an end to the Zika public health crisis (*The Guardian*, <http://tinyurl.com/m6jhyvv>). However, the virus has remained a mystery to researchers since it was first declared a public health emergency in Brazil in 2015. Aside from the overall surprising decline of microcephaly cases after the initial 2015 surge, these cases seemed to be concentrated in the northeastern portion of Brazil, for reasons which remain a mystery. Other countries that had a large number of Zika cases in 2015 only had a fraction of the microcephaly cases that Brazil had.

**“Study: Oregon Patients Using Physician-Assisted Suicide Steadily Increasing”** by Lynne Terry, *The Oregonian*, April 6, 2017

The number of patients using the nation’s first physician-aided suicide program, Oregon’s Death with Dignity Act, has continued to grow since voters first approved the law nearly two decades ago. A new study shows a 12 percent yearly increase in lethal prescriptions from 1998 to

2013, with an unexplained jump of nearly 30 percent in 2015. (<http://tinyurl.com/ybs5elwg>)

Oregon was the first state to legalize physician-assisted suicide. A recent study shows that the number of people using Oregon's Death with Dignity Act continues to increase. While many choose suicide because they are experiencing pain or they cannot pay for their chemotherapy treatments, the majority do so because of concerns about potential loss of autonomy. Additionally, few patients appear to be receiving psychological consultations, despite a study showing that many patients were deeply depressed.

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**“In the Tennessee Delta, a Poor Community Loses Its Hospital—And Sense of Security”** by Amy Goldstein, *The Washington Post*, April 11, 2017

The demise of Haywood Park Community Hospital three years ago this summer added Brownsville to an epidemic of dying hospitals across rural America. Nearly 80 have closed since 2010, including nine in Tennessee, more than in any state but Texas. (<http://tinyurl.com/y7qzenat>)

**“A Pain in the Night and a Harrowing Drive: A Crisis in Rural Health Care Puts Mothers-to-Be on a Risky Road”** by Casey Ross, *STAT News*, April 17, 2017

It is a common story in rural America. Financial pressures, insurance problems, and doctor shortages forced more than 200 hospitals to close their birthing units between 2004 and 2014, according to the University of Minnesota's Rural Health Research Center. That's left millions of women of reproductive age facing longer drives to deliver babies—who sometimes arrive en route. (<http://tinyurl.com/y7dxuo2j>)

The number of hospitals closing in rural areas places those living in such communities at greater risk. Reports have shown that people in rural communities have a greater mortality rate from the top five

causes of death in the U.S. than individuals in urban communities, largely due to lack of resources. Telemedicine has helped in some ways, but the lack of emergency rooms means that people are not getting immediate medical attention.

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**“Yemen's Cholera Outbreak Kills 51 People in Two Weeks: WHO”** *Reuters*, May 12, 2017

A cholera outbreak in Yemen has killed 51 people since April 27, the World Health Organization said on Thursday, more than double the toll of 25 reported three days ago. WHO said there are 2,752 suspected cholera cases and 58 more people have been confirmed as having the diarrheal disease. (<http://tinyurl.com/y86ojxgm>)

Yemen is suffering from the ravages of two-year-long civil war, including an extensive cholera outbreak. As of June 30, there were 219,000 cases of cholera and 1,400 deaths since the cholera outbreak was reported in April (*Reuters*, <http://tinyurl.com/y97lvj7y>), making this the largest cholera outbreak recorded. Cholera is treatable, but the war has left Yemen's medical infrastructure in disarray. In addition “nearly a quarter of Yemen's 28 million people are on the brink of starvation” (*The Economist*, <http://tinyurl.com/yakhxo3l>).

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**“Babies Floating in Fluid-Filled Bags”** by Olga Khazan, *The Atlantic*, April 25, 2017

But within a decade or so, babies born between 23 and 25 weeks might not be thrust into the harsh outside world at all. Instead, they may be immediately plunged into a special bag filled with lab-made amniotic fluid, designed to help them gestate for another month inside an artificial womb. (<http://tinyurl.com/yamm2xfo>)

Scientists were able to gestate a premature lamb in a bag with synthetic amniotic fluid. The lamb was placed in the bag

at the equivalent of human gestation at 23 weeks and was kept in the bag for 28 days where it continued to develop normally. Perhaps this type of bag could be used in infants born extremely premature. However, this technology raises ethical questions about artificial wombs and fetal viability.

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**“Trials of Embryonic Stem Cells to Launch in China”** by David Cyranoski, *Nature*, May 31, 2017

In the next few months, surgeons in the Chinese city of Zhengzhou will carefully drill through the skulls of people with Parkinson's disease and inject 4 million immature neurons derived from human embryonic stem cells into their brains. Then they will patch the patients up, send them home and wait. This will mark the start of the first clinical trial in China using human embryonic stem (ES) cells, and the first one worldwide aimed at treating Parkinson's disease using ES cells from fertilized embryos. In a second trial starting around the same time, a different team in Zhengzhou will use ES cells to target vision loss caused by age-related macular degeneration. (<http://tinyurl.com/y79tew22>)

China has demonstrated that it is more than willing to conduct experiments on nascent human life when earlier this year they used the gene-editing technique CRISPR-Cas9 to edit a human embryo. This past spring, Chinese scientists started human trials using embryonic stem cells in an experimental treatment on Parkinson's patients and those with macular degeneration. Other experts question the use of precursor cells as “troubling.”

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