TOP BIOETHICS STORIES: OCTOBER - DECEMBER 2011 EDITION

BY APRIL PONTO, RESEARCH ASSISTANT

1. "Even Compliant Parents Doubt Vaccine Safety" by William Hudson, *CNN*, October 3, 2011.

The study, published Monday in the journal Pediatrics, confirms that about 2% of parents living in the United States are refusing all vaccines for their children, and more than one in 10 alter the Centers for Disease Control and Prevention-recommended vaccination schedule by delaying or refusing certain vaccines. (http://tinyurl.com/83z4wd6)

2011 was marked by the most cases of measles since 1996. This is attributed, in part, to parents not vaccinating their children or delaying vaccination. Doctors believe parents are not following vaccination guidelines because many of the diseases have fallen out of public view.

2. "Hormonal Contraception Ups HIV Risk in Women" by My Health News Daily Staff, *MSNBC*, October 3, 2011.

Hormonal contraception may make it easier for HIV to spread between heterosexual sex partners, according to a new study conducted in Africa. Women in the study who used hormonal contraception had double the risk of acquiring HIV or transmitting it to their male partners as those who did not use hormonal contraception. (http://tinyurl.com/3f2gepc)

Evidence suggests that women using oral or injectable contraceptives are more likely to contract and spread HIV to their partners. The reason for this is unknown, but doctors believe it may be the result of changes created by hormonal contraceptives in the lining of the cervix and vagina. Experts are calling for more research until any action is taken that might limit the use of hormonal contraception.

3. "Egg Donor Compensation is to Triple under New HFEA Guidelines" by Jane Hughes and James Gallagher, *BBC News*, October 19, 2011.

The UK's fertility watchdog has agreed to triple the compensation given to women who donate eggs to help infertile couples to have a child. Experts believe this will encourage more women to donate, but critics warn it may create financial incentives. (http://tinyurl.com/63guwrt)

The Human Fertilization Embryology Authority, HFEA, has agreed to raise the compensation given to egg donors from £250 to £750 per donation. Many see this increase as fair and adequate compensation for lost wages during the course of the donation procedure. Others see it simply as paying women to donate their eggs. Due to insufficient numbers of donated eggs some couples have turned to other countries, such as Spain and the United States, which have more relaxed laws governing egg donation.

4. "Animal Transplants Coming 'Soon'" by James Gallagher, *BBC News*, October 20, 2011.

Using animals as a source of organs for transplantation into humans was once one of medicine's next big things - a solution to transplant waiting lists. However, there have been problems with rejection - and recently stem cells have been grabbing the spotlight. But some researchers are now saying that transplants from animals "could soon become a reality", but not necessarily as originally expected. (http://tinyurl.com/6yb2dxe)

Although there has been much attention surrounding animal-to-human organ transplants, scientists now believe a better and more effective

technology is transplantation of a small number of cells from pigs to humans as opposed to using a whole organ. To date, this experimental method has proven to be effective in patients suffering from type 1 diabetes, though further research is still needed.

5. "Artificial Blood Could Be Used within Next Decade" by Nick Collins, *The Telegraph*, October 27, 2011.

Clinical trials using blood created from adult stem cells are set to begin within the next two or three years, raising the prospect it could soon become routinely used where real blood is unavailable. (http://tinyurl.com/5uesffk)

Although blood manufactured from adult stem cells is still an imperfect technology and cannot be used in every situation, it is a promising treatment for use in ambulances, war zones, and underdeveloped countries. Many hope that blood created from adult stem cells will help to alleviate issues of scarcity, and remove the risk of the spread of disease through contaminated human blood.

6. "Mississippi's 'Personhood Amendment' Fails at Polls" by CBS/AP, *CBS News*, November 8, 2011.

The so-called "personhood" initiative was rejected by more than 55 percent of voters, falling far short of the threshold needed for it to be enacted. If it had passed, it was virtually assured of drawing legal challenges because it conflicts with the Supreme Court's 1973 Roe v. Wade decision that established a legal right to abortion. Supporters of the initiative wanted to provoke a lawsuit to challenge the landmark ruling. (http://tinyurl.com/bmhtkdg)

The ballot initiative sought to be the first of its kind to assert that life begins

at conception. Among the concerns expressed regarding this initiative were potential ramifications for in vitro fertilization and the Morning-After Pill. Similar initiatives are appearing in other states beginning in 2012.

7. "Bedside Test Finds Awareness in Vegetative Brains" by Malcolm Ritter, *MSNBC*, November 9, 2011.

In recent years, scientists have learned that some patients believed to be in a vegetative state actually have some awareness and that they might be able to communicate. Now, a new study suggests a portable brain monitor can detect signs of this, perhaps making it possible someday for doctors to easily double-check the diagnosis at the bedside. (http://tinyurl.com/7ujtjmm)

By strapping a tight-fitting cap on a patient's head, doctors can determine brain activity using an EEG machine. In a test, three out of sixteen patients thought to be in a vegetative state showed signs of being able to listen and respond to cues. Patients found to have discernible brain activity may be given a chance at rehabilitation or a longer stay in a rehabilitation hospital.

8. "Supreme Court Takes Up Challenge to Health Care Reform Law" by Bill Mears, *CNN*, November 15, 2011.

As expected, the Supreme Court has agreed to decide the constitutionality of the sweeping health care reform law championed by President Barack Obama. The high court agreed to hear two major questions: whether the law's key provision is unconstitutional, and if so, whether the entire law, with its 450 sections, must be scrapped. (http://tinyurl.com/7ne9pu8)

Led by the state of Florida, the largest challenge has emerged against the Patient Protection and Affordable Care Act (PPACA). Twenty-six states have joined with Florida and the case is expected to be ruled on by June. At stake is the provision for the individual mandate for coverage. Proponents of PPACA are confident that it is constitutional

and will not be overturned. Opponents, however, argue that states should not be forced to expand Medicaid costs as well as force citizens to buy medical insurance.

9. "Survey: U.S. Doctors Disagree on Pregnancy Start" by Kerry Grens, *Reuters*, November 18, 2011.

Most U.S. doctors believe pregnancy starts when the sperm fertilizes the egg, a survey shows, contradicting the position of a key medical group with a view that could potentially affect U.S. policy and laws regarding contraception and research. (http://tinyurl.com/7td8jck)

After polling more than 1,000 obstetrician-gynecologists, a survey led by CBHD Fellow Farr Curlin has shown that a majority of doctors disagree with the American College of Obstetrics and Gynecology's definition of pregnancy beginning at implantation. According to the survey, 57 out of every 100 doctors believe that pregnancy begins at conception. Respondents were given the option of pregnancy beginning at conception, implantation, or saying they were unsure.

10. "Court: Some Bone Marrow Donors Can Be Paid," *The Associated Press*, December 1, 2011.

A federal appeals court says some bone marrow donors can be paid, overturning a decades-old law that made such compensation a crime. (http://tinyurl.com/6m2mhrc)

New technology has made the process of donating bone marrow similar to donating plasma. With this change in bone marrow donation, the 9th U.S. Circuit Court of Appeals has said that donation of bone marrow is exempt from a prior law making it a felony. Those choosing to donate can now be paid.

11. "'Morning After' Pill Will Stay Prescription-Only for Girls under 17" by Miriam Falco and Jennifer Bixler, *CNN*, December 7, 2011.

The secretary of Health and Human Services overruled Wednesday a Food and Drug Administration recommendation that would have made the emergency contraceptive pill Plan B One-Step available over the counter to girls younger than 17. (http://tinyurl.com/6v5magz)

In the U.S. the Morning-After Pill is available by prescription only to women under seventeen years of age. HHS Secretary Kathleen Sebelius overruled the FDA's request for the drug to be made available with prescription regardless of age. Proponents of the Morning-After Pill claim that politics are being placed above science and reproductive health. Those who agree with the HHS Secretary's decision cite that more education and greater emphasis on pregnancy prevention is needed.

12. "DNA: The Next Big Hacking Frontier" by Vivek Wadhwa, *The Washington Post*, December 8, 2011.

Craig Venter, who led the research at Celera, announced a decade later, in May 2010, that his team had, for the first time in history, built a synthetic life form — by "writing" DNA. Christened Mycoplasma mycoides JCVI-syn1.0, also known as, "Synthia," the slow-growing, harmless bacterium was made of a synthetic genome with 1,077,947 DNA base pairs. (http://tinyurl.com/7w2rqdt)

Celera, a company that ten years ago announced they made a working draft of the human genome, has announced the creation of a synthetic life form. Researchers have predicted that in the future fighting disease might be as easy as downloading an app and modifying it to fit your needs. Others are voicing concern over the potential threat of bioterrorism and safety issues in this new development.