There's a certain rhythm to life and death, a certain expectation—so many births, so many deaths, so much time in any one person’s lifespan. So it’s disorienting to contemplate sudden numbers of mass death. Twenty thousand … fifty thousand … 100 thousand … 200 thousand. Such numbers are usually confined safely to the newspaper. Usually associated with foreign sounding words like tsunami or historical sounding ones like holocaust. So when traveling in Haiti by car from Santo Domingo to Port-au-Prince last January I experienced a mounting sense of unreality and unease. Casualty numbers, reported faithfully by our Blackberries, kept increasing. My disorientation was no doubt accentuated by fumes emanating from the back seat. We were traveling with three full water cooler jugs, but also three others emptied and re-filled with gasoline, then sealed with duct tape. Gasoline, it turns out, is an excellent solvent for duct tape.

The smell of petroleum turned out to be useful though, as it partially masked the smell of rotting bodies as we entered Port-au-Prince. We’d entered from the east, noticing first the occasional toppled masonry wall, then with increasing frequency damaged buildings, then multi-storied structures pancaked down to the height of one, then finally heaps of gravel completely unrecognizable as former buildings. My fellow travelers were destined for various locations in and around Port-au-Prince. I was destined for the USNS Comfort, a hospital ship anchored just off the coast.

The USNS Comfort lacked the rhythm of normal hospital operations—so many admissions, a typical length of stay, after-care arrangements, followed by discharge. Work can be busy, when admitting half a dozen critically ill patients within a day. Over time they mostly get better, and patients leave the hospital at more or less the same rate that they enter. But when I leapt from the helicopter to the heli-pad deck onboard the ship, nothing was familiar. Partly this was superficial—this was the first time I’d practiced medicine on board a ship after all, and the first time my colleagues were wearing military fatigues, thus the environment looked foreign. But more fundamentally, the rhythm felt all wrong. Patients had started arriving a couple of days before me, even before the Comfort was within sight of land, once the ship had sailed within helicopter range of Haiti. Patients arrived by the hundreds—more than 600 in fact, within the first two to three days. So when I went below deck, meeting my military colleagues while they swayed on their feet with exhaustion, and entered the pediatric intensive care unit (PICU) for the first time, I was greeted with barely contained chaos. In the first hour of work, simply trying to account for all the patients present, I discovered that most of them hadn’t eaten for days. The medical staff had been so overwhelmed trying to save lives—intubating patients to place them on ventilators, struggling to place intravascular catheters for desperately needed medications, performing emergency amputations—that something as mundane as ordering food had slipped by the wayside. I tried to gently point this out to a military nurse, very experienced, supremely competent, and
Beyond “Battlefield” Medicine: The Challenges of Short-Term Medical Aid
by Kyle Denison Martin, M.A., D.O. student

A little more than a month after the catastrophic earthquake struck Haiti on January 12th, 2010, a fire broke out in the city of Jacmel. While many in the community gathered to witness the tragedy, one man struggled to escape from the flames. Badly burnt he fell down onto the pavement and into the hands of American doctors and nurses who had been staying in a guesthouse adjacent to the fire.

The foreign medical workers put their patient in the back of a pick-up truck and hurried to a makeshift hospital set up after the earthquake. Severe burns deplete huge reservoirs of water in the body. If fluid isn’t replaced quickly and consistently a patient can go into hypovolemic shock. Furthermore, without intact skin to protect the body pathogens like bacteria and viruses can enter and wreak havoc.

To address these problems the medical team gave their patient an IV and started to clean his wounds with saline. He yelped in pain as the fluid met his badly burnt skin. More than two-thirds of his body was covered in burns. His prognosis was grim.

Yet the doctors and nurses who treated him managed to get him into stable condition. He was in intense pain but seemed excited when his wife came to visit. The medical team celebrated their success. Arriving after the earthquake they had come to treat those affected by the catastrophe. For the most part they saw patients with acid-reflux, fatigue, and upper-respiratory infections. This was their first “exciting” case.

The patient in this story eventually died, most likely from infection secondary to his burns. As a barrier to bacteria skin is hard to replace. Even when sterile bandages are used and changed on a regular basis it’s easy for one invader to slip through and cause trouble.

After they returned to the United States the medical team lost track of the patient that they had treated in Jacmel. They returned to their jobs and families with memories of their trip stored in photos and journals.

One member of the team decided to share the memory of their courageous efforts in Jacmel by posting a photo on Facebook. The photo featured the medical team of doctors and nurses hovering over their badly burnt patient. As they gathered around him and smiled at their accomplishment, he laid covered in bandages on the hospital bed.

After news of the earthquake in Haiti spread many people looked for ways to rush in and offer assistance. Some brought medical knowledge or useful experience. Others, overwhelmed by the compassion they felt for those affected by the disaster, were compelled to do more than mail in a check.

As time passed volunteers continued to flood into Haiti to help with the recovery effort. Yet the needs of the Haitian people were changing. Immediately after the catastrophe almost all of the wounded needed acute care. Amputations, splints, and sutures were necessary to save lives. Physicians referred to the care that they provided during this period as “battlefield” medicine, likening it to treating soldiers on the field of war.

Many medical workers who came to Haiti at this time found themselves in an odd situation: they felt useless. In the United States they might be an expert in their medical specialty, yet in the environment of “battlefield” medicine they lacked the skills needed to treat their patients. Still most physicians found a way to provide care, either by helping to triage victims or by giving postoperative follow-up care.

Months after the earthquake there was very little “battlefield” medicine needed in Haiti. Health needs had shifted from the acute to the chronic. Large numbers of people affected by the earthquake had resettled into tightly-clustered camps. These camps featured limited access to sanitation. Due to the tight living conditions infections could pass quickly from one person to the next.

Medical teams arrived ill-equipped to address these needs. While they might have had medications to treat a patient’s infection they had little means of providing follow-up care. Furthermore, they had no way of preventing that same patient from becoming re-infected due to the conditions in his or her living environment. Patients with chronic illness, such as diabetes or hypertension, could be treated for a short period of time with no guarantee that they could get more medicine after those rations were depleted.

In the acute setting of “battlefield” medicine short-term medical teams

(Continued on page 6)
Physician Participation in Capital Punishment: A Critical Perspective
by Sarah Jorgenson, M.A. Candidate in Bioethics Humanities and Society

On March 2nd of this year, the state of Washington updated its lethal injection protocol from a three-drug series to a one-drug administration. Washington is following the state of Ohio, which switched to a one-drug administration after the failed execution of death row inmate Romell Broom on September 15, 2009, when executioners struggled for two hours to find a vein in order to administer the lethal injection. The movement to simplify lethal injections and to ensure that death by lethal injection honors the Constitution’s Eighth Amendment to protect against cruel and unusual punishment is noteworthy, yet it fails to address the ethical problems of physician participation in capital punishment. Medical professionals are frequently called upon to be part of the process of lethal injection resulting in ethical tensions between participating physicians, their professional societies, and death row inmates.

The three-drug method mentioned earlier begins with sodium thiopental, an anesthetic that causes unconsciousness. Then pancuronium bromide, a muscle relaxant which stops breathing by paralyzing the diaphragm and the lungs, is injected. Lastly, the toxin potassium chloride is used which induces cardiac arrest and permanently stops the inmate’s heart. The one-drug method relies solely on sodium thiopental, but in a larger dose, in an attempt to eliminate pain and suffering. Ohio and Washington switched to the one-drug method in hopes of avoiding the complications associated with the three-drug protocol. Evidence from execution logs in California revealed that with the eleven lethal injections in California, six death row inmates may have not stopped breathing before the injection of the second drug, pancuronium bromide. Thus, death row inmates may have experienced excruciating pain from suffocation and a feeling of intense burning as the third drug entered the body. This failed process would then render lethal injection unconstitutional under the Eighth Amendment. California’s U.S. District Court in 2006 ruled that for a lethal injection to occur with death row inmate Michael Morales, the state had to provide qualified medical personnel who would ensure that he was unconscious during the procedure or the department of corrections’ execution protocol had to be altered so that only one kind of drug would be given, rather than the standard sequence of three drugs.

(Continued online at: http://www.bioethics.msu.edu/index/index.php?option=com_content&view=article&id=79&Itemid=77)

Umbilical Cord Blood Banking
by Kelly Krcmarik and Kellie Owens, BHS undergraduate specialization students

In 1974, Swedish scientist Søren Knudtzon noticed an unusual mass of cells in the blood of an umbilical cord. Later that year, he published the first report documenting umbilical cord blood as a source of stem cells. Over a decade later, a six-year-old boy suffering from Fanconi’s anemia received the first successful cord blood therapy, a procedure similar to bone marrow transplantation, and today cord blood transplants from unrelated donors have cured more than 5,500 people. Umbilical cord blood, which was once considered medical waste, can potentially treat thousands of diseases.

Cord blood is a promising therapeutic treatment for over seventy genetic, hematologic, immunologic, metabolic, and oncologic disorders. The treatment capitalizes on the umbilical cord blood as a unique source of hematopoietic, progenitor, and pluripotent mesenchymal stem cells. Cord blood treatment is an effective alternative to bone marrow and peripheral blood stem cell transplants because it has a lower incidence of graft-versus-host disease. With a well matched donor and a successful graft, cord blood treatment shows improved long-term outcomes.

Cord blood is potentially less controversial than stem cells harvested from embryos because it does not involve the destruction of an embryo. It contains pluripotent adult stem cells, which have the capability of transforming themselves into many other types of tissues. Current research suggests that scientists can reprogram cord blood into embryonic-like stem cells, which would increase the potential of cord blood. At first glance, cord blood promises to cure disease using a form of stem cells free from controversy. However, it has not led to the medical miracle that many imagined because a variety of medical, social, and political problems have hampered its adoption as a medical treatment.

Following the first successful cord blood transplantation in 1988, the National Institutes of Health (NIH) granted funds to the New York Blood Center to establish the world’s first public cord blood collection program. Soon after, several companies capitalized on cord blood’s potential—opening private centers to store cord blood for individual families. Today, there are thirty-three public and thirty private cord blood banks in the United States and dozens more around the world.

The American Academy of Pediatrics (AAP) estimates that the chance a child will actually need to use their stored blood ranges from one in one thousand to one in two hundred thousand. The limited quantity of donations from minority populations also disrupts an accurate assessment of need for cord blood.

(Continued online at: http://www.bioethics.msu.edu/index/index.php?option=com_content&view=article&id=79&Itemid=77)
and our other patients—those who were also critically ill but with good chances for recovery—were being actively endangered by our increasingly futile efforts to keep this one baby from dying. So we stopped, even though up to that point he had normal pupils, even though up to that point his blood pressure was minimally acceptable. In short, even though we had good evidence that up until that moment that the brain inside his critically ill body was still uninjured, we stopped resuscitating him. His father was sitting twenty feet away. We had no time to consult with him in advance, and precious little time to console him after the fact.

I've practiced pediatrics in other settings in Haiti before—on land, in a Haitian hospital, and without any of the technological support available in a modern, developed-world hospital. So I've seen that the end result of any number of severe diseases is identical. Left untreated, leukemia, diabetes, pneumonia, diarrhea and dehydration all end the same way—breathing that is labored, then not so labored, then not labored at all as the patient develops a thousand-yard stare and slips away. I've seen it in Haiti hundreds of times, and since I have no ventilators there (under ordinary circumstances) a great weight of responsibility is lifted from my shoulders. I can't possibly save them, so I'm not obligated to try. I merely have to make their death as comfortable as the resources present allow, with perhaps a blanket, or a sip of juice, some oxygen, or again some morphine.

The Comfort was different. We had ventilators. We had to try. But we didn't have all the extended community resources that surround modern hospital care in the United States. Sometimes my patients at home survive their stay in the PICU, but only with significant injury. Sometimes they are left with lung scarring so severe that they require lifelong oxygen, with ventilators at home, attached surgically to their necks. Sometimes their brains are permanently damaged such that they end up in nursing homes, fed by tubes, perhaps never walking, perhaps never talking again.

Haiti was different. Abruptly transplanting a modern ICU there absolutely saved many lives. But hardly all of them. And it created terrible dilemmas. We were forced to withdraw support from patients far earlier than we otherwise might have in similar circumstances back home. We couldn't fathom the outcomes of severe chronic lung disease or severe neurologic impairment absent sophisticated home care resources—resources that not only do not exist anywhere in Haiti today, but have never existed there, even before the earthquake.

Even prior to the earthquake, Haitian child mortality statistics and life expectancy were among the worst in the world. In the United States, people react with grief and shock to the death of a child—such an occurrence is so rare it can be extraordinarily hard to console grieving parents, whose trauma is so far outside our collective experience. Not so in Haiti. A Haitian parent experiences grief every bit as intense as anywhere else in the world, but they aren't shocked. Baron Samedi (the Haitian Voodoo Grim Reaper) is always a busy man in Haiti. To be Haitian is to know him intimately.

I was among the lucky few. Lucky to have been in the unique position to help. Lucky to return safely home after a month, where I could experience the luxury of guilt. My guilt is complex. I grieve for the ones I did save, but perhaps shouldn't have. So I'm left wondering if my patients' parents can understand my guilt, and find it in themselves to forgive me.
In the last issue of the MHR, Lisa Campo-Engelstein, Ph.D., wrote about the potential of a male contraceptive pill. The contributors to this InKLinks continue this discussion. InKLinks is a regular column in which readers reflect on issues related to the previous lead article. It is meant to tap the rich intellectual resources that this network provides. We welcome your contribution at altimar@msu.edu.

Prescribing Autonomy?

Western society’s effort to control fertility has a long, fascinating history. Until the advent of the diaphragm and cervical cap early in the twentieth century, women relied heavily on male contraceptive procedures such as withdrawal before ejaculation. Margaret Sanger, perhaps the best known advocate of female contraception a century ago, noted regretfully that for a working-class woman, for whom these “modern,” costly female methods of contraception were not accessible, the search for “self-protection she could herself use” continued for a greater length of time. After the gradual expansion of condom use and the notable, if sometimes questionable, “improvement” of birth control pills, we seem to be stepping into the era of male contraception again. This time, it appears one form could be a male pill that suppresses a protein in sperm crucial to male fertility.

What happens to men and women’s autonomy if this male contraceptive, which controls men’s fertility with possibly fewer side effects than female pills, indeed becomes available? Would it free women from “contraceptive burdens and sacrifices [that] limit [their] freedoms”? Campo-Engelstein suggests in her thought-provoking essay that the answer is no, because the mere availability of male pills would not make men take them. If there is no change in dominant norms about contraceptive responsibility, there would be no change in who takes a pill. This is no doubt a reasonable observation, and I suspect that what needs re-evaluation is not only the social norm that demands women to make the sacrifices Campo-Engelstein mentions; it is also “autonomy” as a complex ideal that we pursue in diverse ways. True, “men’s autonomy is [currently] enhanced by their freedom from contraceptive responsibility.”

But as Campo-Engelstein acknowledges, men might also “enhance [their] reproductive autonomy” if male contraceptives are more readily available. I would add that many women today think just that about the female birth-control pill, echoing the sentiment that Sanger expressed about a century ago. Moreover, I am curious to know if more than 50% of women discontinue the pills after a year of use not just because of their side effects, but because the discontinuation is what they decided to be the best option in consultation with their partners.

In such cases, women might be “negotiating” with men, but at the same time, they might be reaching out for “autonomy” as well. My point is that the question of who takes a pill is not necessarily the only question to ask when thinking about autonomy. A person’s autonomy might be achieved by being able to control her/his fertility “without their partner’s participation or knowledge.” But for another person, defining autonomy in this way might be irrelevant or even damaging to her/his well-being. Autonomy, like subjectivity, expresses itself in a multitude of ways.

Another question we might ask is if such drastic, pill-based interventions into anyone’s fertility, either men’s or women’s, should have anything to do with anyone’s autonomy. But this might be the question we do not have the luxury of asking anymore.

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Science and Social Norms

There are still many obstacles that hinder the development and acceptance of long-acting, reversible contraceptives (LARCs) for men. Dr. Campo-Engelstein points out that gender ideology often slows down progress in this area. For example, she shows that mass media articles in the English-speaking world indicate many women would not trust men with contraception responsibilities, whereas an international study revealed that only two percent of women would not trust their partner to use contraception in a responsible manner. I want to briefly examine some of the limits of the study, as well as briefly explore ways in which we can promote LARCs for men while still diligently working to change social norms.

The international study which reported that 98% of women would trust their partners with contraception was published in 2000. It surveyed 1,894 women attending family planning clinics in Scotland, China and South Africa. The study showed that though lack of trust was not an issue for most of the women surveyed, there were other considerations which varied by demographics. For instance, fifty-five percent of women in Edinburgh felt that their partner would be most comfortable taking a daily pill while a monthly injectable was the most popular preparation in Cape Town and Shanghai. Conversely, there have been other studies that indicate not all women trust their partners with contraception. A study by Teesside University surveyed 140 men and 240 women in North East England and found that women doubted that their partner could be trusted to regularly take birth control
could appropriately meet the needs of patients. However months after the catastrophe, short-term medical teams were little more than a “stop gap” measure.

The ethics of medical missions trips are rarely examined. Participants are typically hailed as heroes providing care to those in need. Trips are often to the most remote and impoverished communities. When participants return home, they can’t wait to share their stories of treating illness and saving lives.

Yet more often than not, short-term medical mission teams do very little to benefit the communities that they visit. In all truth they may even cause harm.

Short-term medical teams are best suited for treating acute needs. These needs include trauma care and the treatment of acute infection.

In contrast, short-term medical teams are ill-equipped to treat patients with chronic illness, with those diseases that must be continually treated over time. This includes patients with diabetes, hypertension, acid reflux, and chronic pain. While patients may be able to temporarily receive medications from a short-term medical team, their symptoms will return as soon as those medications are used up.

Few short-term medical teams keep records of the patients they have seen and the medications that they have distributed. Medications may not even be labeled for dose and identification. This deficiency can cause problems if a patient desires follow-up care.

Many participants on short-term medical mission trips do not consider the ethical implications of their actions. Consider the story presented at the beginning of this article. The participants on the medical mission trip failed to respect the autonomy and confidentiality of their patient. Moreover, their actions dehumanized the Haitian man they were treating, transforming him into an object without voice or rights.

Short-term medical mission teams are a “stop gap” measure. In other words, they meet immediate needs but do not play a role in enacting systemic change. In fact these teams may delay the establishment of more permanent structures better suited to address these needs. In such a fashion short-term medical missions may in fact do harm while attempting to do good.

Some might say that medical mission trips enhance empathy among strangers and may encourage individuals to establish more long-term projects in those communities they visit. That medical mission trips allow people from different regions, lifestyles, and cultures to interact cannot be denied. Yet these interactions are time-limited and as a result lack depth. Differences in language and culture may promote misunderstandings and the illusion of empathy.

Stories like those of Paul Farmer in Haiti and Greg Mortenson in Pakistan stand out as examples of individuals who have visited impoverished communities and have followed through on their promises to provide sustainable resources and enact systemic change. Yet stories like these are the exception and not the rule. Typically, when challenges arise, long-term projects are abandoned altogether.

Medical mission trips should not be immune to ethical scrutiny. Short-term trips are best suited for addressing acute needs of a community. They do a poor job of treating chronic illness and enacting systemic change. In fact short-term medical mission trips may even delay systemic change and hinder improvements in patient care. As medical mission trips are planned ethical considerations should be carefully considered. Furthermore, participants on medical mission trips should be educated on the potential ethical implications of their actions.
JUDITH ANDRE

Presentations
- "Feminist Bioethics," at the Institute for Biomedical Law and Ethics, Ewha Women's University, Seoul, South Korea (March 2010)
- "International Research Ethics," Adult Stem Cell Research Center, Dept. of Veterinary Public Health, College of Veterinary Medicine, Seoul National University, South Korea (March 2010)

ELIZABETH (LIBBY) BOGDAN-LOVIS

Facilitation
- Ethics Committee Training Workshop, Marquette General Hospital, Marquette, MI (May 2010)

Publications

LEONARD FLECK

Presentations
- "Embryonic Stem Cells: Ethical and Policy Challenges," Grand Rounds at Northern Michigan Hospital (May 2010)
- "Health Reform and Health Care Rationing: Rough Justice, Ragged Edges, and Rugged Moral Terrain," presentation for Lutheran University Church, East Lansing (April 2010)
- "Health Reform: Ethical and Policy Challenges," two talks to health care administrators and health policy analysts in Beijing and Changsha, China (as part of a five-person MSU delegation) (May 2010)

Publications
- "Sustainable Health Reform: Are Individual Mandates Needed And/Or Justified?" Proceedings of the Philosophy and Medicine Committee of the American Philosophical Association, available on the APA Website (Spring 2010)
- "Health Reform: Rough Justice, Ragged Edges, Rugged Moral Terrain," Ethics-In-Formation (Spring 2010)

MARGARET HOLMES-ROVNER

Presentations

Appointments
- Judge, at the Flint/FAIME Community Research Day. Flint, Michigan (April 2010)

Publications

DAVID KOZISHEK

Presentations
- Ethics Committee Training Workshop, Marquette General Hospital, Marquette, MI (May 2010)

MISHA STRAUSS

Presentations
- "The Business of Medicine" to SIPS, a medical student interest group in the College of Human Medicine at MSU, East Lansing, MI (April 2010) and to the MSU pediatric residency program East Lansing Campus, East Lansing MI (May 2010)
- "The Patient-Provider Relationship in the Electronic Age: An Ethical Perspective” at Chelsea Community Hospital in Chelsea, Michigan (May 2010)
- Poster Presentation "Model Policies and procedures regarding vaccine refusal and parent requests for personalized vaccine schedules for pediatric offices" for Pediatric Ethics 2010: Advancing the Interests of Children. Cleveland, OH (April 2010)

TOM TOMLINSON

Facilitation
- Bioethics and Humanities Journal Club, Grand Rapids and East Lansing (March 2010)

Presentations
- Ethics Committee Training Workshop, Marquette General Hospital, Marquette, MI (May 2010)
The Center Bids Farewell

The Center faculty and staff extend their very best wishes to Gerald Schatz, who will retire at the end of this academic year.

Jerry joined the Center in 2005, and has been teaching small groups and lecturing in ethics and policy courses in CHM, COM, and CVM. His most notable teaching contribution has been the development of courses in the ethics and law of human subjects research. International Law and Ethics of Human Subjects Research and U.S. Law and Ethics of Human Subjects Research were taught as dually-listed courses in both CHM and the College of Law, and attracted law and graduate students, as well as clinical researchers. Jerry's retirement will leave quite a void, since there is no one else available with the qualifications he brought to these courses.

We will miss not just his depth of knowledge, but his impish wit.
Happy sailing, Jerry!