Pasyon, Lespri, Renmen: The Haitian Way of Life

By Jie Jiao

While most of my college and medical school classmates returned from medical trips captivated and inspired, I came back humbled and burning with questions. Let me rewind and tell my story from the beginning.

Before my second year of medical school, I spent my summer in Haiti working with a non-profit medical organization based in Port-au-Prince and the Central Plateau. While my main focus was to quantify and address the increasing shift in disease prevalence towards chronic conditions, my observations took on a more anthropological approach as I learned about Haitian culture and lifestyle.

Haiti is a country rich in tradition, happiness, and spirit; a liveliness reflective of Haiti's incredible history. Every individual I met was committed to working their hardest to earn a living and provide for their family. However no matter how hard these individuals worked, the extreme forms of poverty they were living in were still unacceptable and shocking to my eyes. Several families shared a space in unfinished concrete rooms, sandals worn down to a skinny strap held together by the cheapest tape, children so malnourished their beautiful black ringlets took on a copper hue. I wondered if and how Haiti could ever raise its citizens out of this poverty and create a sustainable, independent country.

To understand this poverty is to understand the everyday life of a Haitian. While I was not allowed to exit the hospital compound due to security reasons, Haitian life was brought to me in the forms of the patients and their stories. From machete wounds endangering limbs to beer bottle lacerations, I witnessed violence. From anticholinesterase poisoning, I saw the long-standing Haitian practice of Voodoo. From the loss of two intubated children due to a city blackout, I appreciated the necessity of a permanent electrical source. By witnessing patients pass away because their disease was addressed too late in progression, I learned the transiency of life. Even though I was at one of the largest foreign aid hospitals in the country that has saved many lives and ameliorated the prognosis of many others, the events I witnessed were accepted as commonplace. My

inquiries into this acceptance translated into a curiosity about the infrastructure of these hospitals and the utilization of foreign support.

As time passed, I appreciated the crucial role foreign aid played in addressing the immediate healthcare issues in Haiti. However I became wary to the sustainability of this system. To operate the hospital I was working at, many donations were required. This was obtained in the form of volunteer personnel, medications, and equipment from Western countries. But how do you apply Western medicine and solutions in a country such as Haiti where patients were lost due to electricity outages? Further, how long will foreign aid last? And an even more ethically challenging question: is it fair to allow the Haitians to build up so much dependence on their Western supporters for something as essential as healthcare? Will the system be sustainable once foreign aid has ceased? Putting Band-Aids on something that requires stitches can only last for so long.

While I have no answer to this complex question, my experiences in Haiti taught me to understand the universal themes underlying systemic issues. If the goal is to help Haiti become an independent nation, supporting nations and non-profit groups need to evaluate what is underlying the health and economic issues facing Haiti. This begins with communication - communication with and among the Haitian government, people, and supporting organizations about what is needed and what is currently in place. Working in concert, these organizations can help to build a Haiti for Haiti. With communication, Haitians can begin to piece together gaps in their healthcare system, evaluate existing models and build upon current models that have shown success in addressing healthcare issues.

Although I was only in Haiti for a brief period of time, I learned a lot about people, the practice of medicine, and challenges that face medical professionals. After processing my experiences in Haiti, I still hold onto my idealist perception of medicine. I believe the disparities that we witness throughout global health and healthcare can be addressed. While I have mainly discussed the injustices I witnessed in Haiti, I want to emphasize an incredible strength Haiti has that will be instrumental in addressing the injustices we witness. Passion. The Haitians have an incredible passion for life and their country which is evident in every aspect of daily living. Even through roadblocks and lack of resources I believe the Haitians can continue with the building process and persevere; for themselves and for their country.

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Living conditions in Port Au Prince, Haiti. **Photo credit:** Jie Jiao

A Summer Abroad: The Lost Children of Peru

By Mark Kashtan

When I first arrived at the Hogar, I was surprised to find a modest two-story house that would not have been out of place in a middle-class suburb back home in California. Nestled in a small Peruvian village, its unassuming façade belied the institution's mission of providing free care to sick and impoverished children from across the country, more than fifty of whom called the Hogar home at any given time. Inside the foyer, pictures of children and volunteers going back more than a decade covered every wall. Soon voices drifted down the solid oak staircase, followed a moment later by their owners, one of whom I recognized as the doctor who ran the Hogar.

"You must be our new volunteer. Welcome to my home."

I was first inspired to journey to the Hogar by a documentary produced by two brothers from a boys' home in New York. In the film the young men search for the answer to the question "what makes us human?" by seeking out and living amongst some of the most vulnerable that humanity has to offer: the homeless of New York City, the lepers of a colony in Africa, and the children of Dr. Tony's clinic in Peru.

In fact, to call the Hogar a clinic would be something of a misnomer. While the children do receive in-home care for their day-to-day needs, most of their medical treatment is actually delivered in hospitals and specialty clinics in Lima, a two hour ride away by bus. A handful of kids make the long journey each weekday, braving the cutthroat highway traffic in order to receive the examinations, prescriptions, and surgeries for which they have left their families behind. Staff members accompany the children on these trips into the city, as do volunteers when infants, toddlers, or those confined to wheelchairs are counted among the day's travelers.

While the regular pilgrimage to Lima for medical care is the reason most of the children have come to the Hogar, it is by no means the defining experience of their time there. Every child who is able attends school as long as he or she stays at the Hogar, while those who are unable benefit from the services of an in-home tutor. As important as the schooling is for the children's education, it is perhaps more important for the socialization

they receive. The large number of Hogar children attending the same schools year in and year out have become a fixture in the community, and the familiarity has bred an understanding of the nature of their illnesses, even among their young peers. Bullying or teasing of the children for their health issues – which are often profound and readily apparent, from facial burns to skeletal malformations – is virtually non-existent. These children, some of whose deformities earned them accusations of Satanic influence in their home villages, instead get to grow up in an environment of acceptance and understanding.

Not to be undervalued, either, are the three square meals the children are served every day. Peru is an extremely impoverished country, and for many families putting food on the table is far from a routine affair. With immense urban and rural populations in poverty, as well as enormous family sizes due in no small part to the nation's predominantly Catholic ideology, having enough to eat cannot be taken for granted. The handful of patients that show up regularly to the Hogar's door to be treated for nothing other than malnutrition is a testament to this fact.

The spiritual benefits of the Hogar cannot be understated either. Peru is a ninety percent Catholic country, and the children's religious sensibilities are nurtured as surely by their time at the Hogar as are their bodies. While no child is forced to attend mass, every Sunday the house empties out into the street and parades through the neighborhood together to the local church, and in the afternoon a nun from the local parish visits for Sunday school lessons. Interspersed with the pictures of smiling children and past volunteers on the walls are images of saints and other holy icons, and before every meal the children recite a simple grace. Many of the children, particularly the older teenagers, find great comfort in their faith, not to mention relief from the day-to-day difficulties of their illnesses.

Ultimately, the real magic of the Hogar is in the community that has been created within its walls. Regardless of the medicine that is practiced there, the collections of crutches and wheelchairs that lie scattered about, or the bandages and medical hardware apparent on its inhabitants, the Hogar is not a clinic – it is a home, and the children and staff that live and work there are a family. Many of the childrens' ultimate ambitions are to become nurses or therapists at the Hogar, an aspiration reinforced by the fact that several staff members are themselves former patients. Alumni drop by often to see their friends and share stories of their lives, and more than a few are now married to spouses they met in the Hogar as children. The importance of this sense of community was illustrated most vividly for me when the school term ended in the middle of my visit. With their studies completed, several children, now healthy, were slated to go home. One boy, a thirteen-year-old, spent an entire morning running about the house, unashamedly in tears, hugging his goodbyes to the nurses, the Mamitas, his friends, and anybody else he could find. As his family piled into their small van and drove away, his eyes never

once left the Hogar. As I would discover, most goodbyes to the Hogar were waged this way – a bittersweet mix of hope and sorrow as the children left one family behind to rejoin the other.

Mark Kashtan is a fourth year medical student at the Medical College of Wisconsin and is pursuing a residency in general surgery. He attended the University of California at Berkeley for his undergraduate degree.

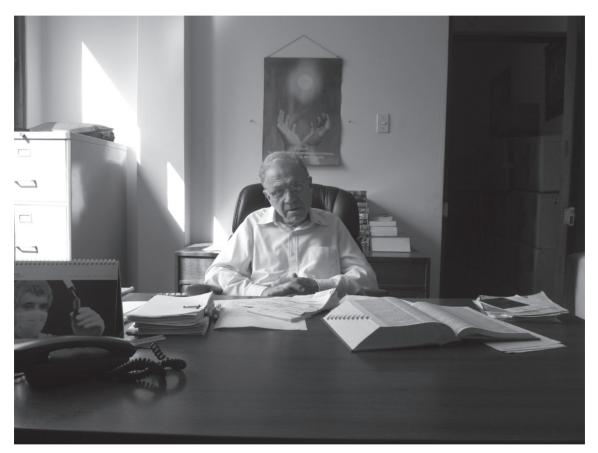


Photo credit: Mark Kashtan

The "Fix"

By Traci Kazmerski

"Nice to meet you, Mike. Why don't you get scrubbed in? We have a clubfoot repair in the OR now."

This was how my husband, an orthopedic surgery resident, was greeted at the CURE hospital in Addis Ababa, Ethiopia this past spring. Within thirty minutes of arrival, he was doing a procedure that would put a fifteen-year old boy on the road to walking normally for the first time in his life.

I was jealous. As a pediatric resident, I watched Mike go into the OR to fix problems as I sat actively identifying them. I had no idea how medicine fit into this culture. I struggled to learn the hospital and city's existing infrastructures. I couldn't even begin to understand what resources were available to the patients I was seeing. Most of the children were undernourished and unvaccinated. Many were from poverty-stricken rural areas with limited access to education and preventive healthcare.

I found myself asking, "Is the 'fixing' that we are doing enough?" I felt overwhelmed and lost. I knew we were doing a good thing by operating on these children. My husband was correcting deformities that had, until these surgeries, rendered them unable to find employment, unsuitable for marriage, and socially ostracized by their communities and families. But, I also knew there was so much more to be done.

A December article in the *New York Times* highlighted the tremendous gains in reducing childhood mortality in the past twenty years. In the most recent Global Burden of Disease report, it was observed that the death rate of children under five years of age has dropped in every country in the world except three. Reducing childhood mortality has been a long-standing goal for aid organizations worldwide, and this achievement is truly remarkable. However, this feat must also be viewed as a jumping-off point. In an article in *Pediatrics*, Jack Shonkoff states, "The campaign to save lives is incomplete if the future prospects of those who survive are constrained to continuing adversity." Reducing childhood mortality, like fixing orthopedic deformities, is just the beginning.

The "rehabilitation process," either of life or limb, is arguably the greater challenge and, during my time in Ethiopia, I encountered many barriers towards achieving this goal.

First, the malnutrition I witnessed in Addis Ababa unfortunately is far from the exception. In developing countries, poor nutrition greatly contributes to all major causes of childhood mortality, including diarrhea, measles, pneumonia, malaria, and neonatal disease. Furthermore, improving the nutritional status of children will not only improve health outcomes far into adulthood, but also affects educational achievement and economic potential. Nutritional supplements and encouragement of breastfeeding are the mainstays for intervention and improvement, but are still not universally available or accepted.

A second barrier I identified in Addis was the effect of social determinants of health. Much research has focused on the negative impact of social stressors on development. Poverty, violence, abuse, and neglect lead to significant poor outcomes in physical, mental, and emotional well-being. Moreover, continued stress can lead to a sense of hopelessness and despair. In these environments, survival is prioritized above all other variables, however crippling those may be.

The relationship between stress and poor health outcomes extends beyond sub-Saharan Africa. In a community survey of a neighborhood in Pittsburgh, Pennsylvania, parents of children with asthma were asked to identify the barriers they faced in adherence to controller therapy. Community violence was cited by many as a major roadblock to regular dosing of inhaled corticosteroids. To put it bluntly, you don't worry much about controlling your asthma when you are worried about your safety. Similarly, a neglected clubfoot, continued breastfeeding, or purified water doesn't seem so important when you are enveloped by more immediate threats of war or poverty.

Lastly, the most powerful factor at play during my trip was a lack of knowledge. Education has long been a focus in improving the conditions in the developing world and is viewed by many as a basic human right. Specifically, education of women has been found to have important implications for improved health and child mortality. Nicholas Kristof and Sheryl WuDunn called attention to this in their book *Half the Sky* as they examined not only health repercussions, but also effects on economic development and treatment of women. Educated women are more likely to seek medical attention for themselves and their families, postpone childbearing, and adopt encouraged health practices. As I saw patient after patient with suboptimal healthcare, I wondered how different their situations would be if their mothers' education were made a priority.

All this theory I know. However, I felt truly powerless when faced with these realities in Ethiopia. But what can we do? Surgical repairs and mission trips cannot be put on hold until we figure out how to curb poverty, develop educational opportunities, and improve access to healthcare. US Ambassador-at-Large for Global Women's Issues Melanne Verveer stated simply that we need "heat at the top and at the bottom." We

need to pressure our government to stress these issues in foreign policy and push for investments in agencies with agendas that will focus where the problems lie. We also should continue to work for the more "immediate fix," whether that be the operation that my husband performs or individually staying vigilantly informed on developing world issues. Engaging in global health goes beyond professional development. It goes beyond theory and rhetoric as well. You become an advocate for the basic human rights of your fellow man.

So, is the "fixing" enough? The answer is no, certainly not. But it is a part of the solution. We, as a society, always have a duty to do more. I will always feel overwhelmed when faced with these issues, but I think Somaly Mam, a former sex slave from Cambodia who now works to rescue young girls with a similar story, put it best: Sometimes people want to do too much and they do nothing. Sometimes they say, "I can't help you." Everyone can help. Everyone can do one thing. Start with your heart ... what it wants.

Traci Kazmerski is a Pediatric Resident at University of Pittsburg.

Standing Among the Empowered

By Aparna Krishnan

I could hear the clanking of iron on metal from across campus. Sawdust filled the air around the small concrete enclosure where four men diligently worked from dawn to dusk to cut, grind, drill, sand, hammer, weld and plaster. After a few hours of labor, their prosthetic masterpiece – the Jaipur Foot – gifted a patiently waiting amputee a second chance to walk again on two feet. Several hundred other amputees awaited their opportunity.

Spending a year in a rural Indian village, working with community groups, living among village health workers, and traveling with an NGO's mobile health team allowed me to appreciate such wonders of comprehensive primary health care and development at the grassroots level. I wove in and out of community-wide discussions as project leaders and community beneficiaries identified socioeconomic and healthcare barriers and created collaborative solutions.

The Jaipur foot is a perfect example of one such solution: the adoption of appropriate technology that is simple, locally produced, cost-effective, and sustainable. It promotes self-sufficiency through an emphasis on local community ownership, management, and maintenance of this technology. The device has transformed the lives of hundreds of thousands of amputees—an untiring construction worker, a blossoming boy with a congenital deformity—and has enabled its users to continue their work and lead functional lives despite the loss of a leg.

What strikes me as beautiful about the Jaipur foot is its ability to be a strategic booster of community empowerment. It is technology that, in my eyes, is fundamentally by the people, for the people; sustainability of a project ultimately takes on real value when self-reliance can unfold within a community through community participation and dissemination of knowledge.

A prosthetic foot in the U.S. averages \$8000. In contrast, the Jaipur Foot costs about \$30 for below-the-knee and \$60 for above-the-knee prosthesis. Creators of this technology tailored the device to the active lifestyles of the poor, ensured it was

waterproof and lightweight, and customized the design to each patient. It continues to be difficult for me to rationalize the marketing and promotion of expensive, state-of-the-art prostheses in a setting where the majority of amputees live in poverty and are some of the most marginalized in Indian society. I learned that the greatest need comes from those who have lost a limb suddenly from road traffic or farming accidents, and vascular complications related to untreated diabetes. It became increasingly clear to me that for these poor, the ability to walk on uneven ground was essential for their work, and days spent without a limb threatens their livelihood and sustenance. I see appropriate technology as a universal solution to local problems; it ensures that the technology is adapted to the people's needs rather than having people adapt to the technology.

Witnessing the transformative changes brought by the Jaipur foot to numerous amputees prompted a change in my own perspective on poverty. I used to view those in poverty as victims of unfortunate circumstances, rather than as people with their own unique skills and passions. Instead of seeing them as people living in poverty, I viewed them as "the poor." For a long time, I ascribed my impressions to this "us" and "them" mentality.

My own transformation has been in how I view my own role as a potential community partner—to be a catalyst in the transformative process and thereby begetting a paradigm shift in the dynamics of power between care providers and end users. In global health, when distances, languages, and cultural discrepancies can make us seem so far removed and disconnected from those we are trying to help, I have come to believe that there can be no "us" and "them." Health and development initiatives cannot merely aim to solve issues by providing a service or mandating change in behaviors, but should build upon community members' strengths and passions, individual and joint, that make them who they are and what they can be.

My work in rural India and countless discussions with grassroots workers have left me with the realization that in today's world, the local and the global are inextricably linked. These days, power is often shared at both of these levels. I have come to appreciate that for effective and sustainable progress in health and development, community empowerment must take advantage of this inter-linkage. Far too often have power issues between "dominant" and "minority" cultures, biomedicine and traditional healing, and professional and common lay people greatly influenced the access to quality care and outcomes of well-intended interventions.

It is not difficult for one, including myself, to grasp the psychological sense of wholeness felt by each handicapped amputee when he or she walks away with a new leg. Watching this transformation occur within minutes, I cannot help but think how such simplicity can have the greatest effectiveness, especially amidst a culture of global health in which a person's needs can be overshadowed by what the system can readily provide.

I often reflect upon my role in the global that will have the greatest impact on the local. The artisans in the Jaipur Foot workshop in a small Indian village have showed me a glimpse of what this role might be through the exchange of appropriate technology as they have taken their skills to artificial limb camps across Maharashtra, the rest of India and abroad in Nigeria, Angola, Liberia and Rwanda. Our health and lives are intertwined in social, economic, physical and emotional webs. I hope to one day leave my footprint in communities, and partner with and empower them to leave their marks in other communities far and wide, whether it be through the spread of people, ideas or a simple foot.

Aparna Krishnan is a medical student at Johns Hopkins University. Prior to medical school, she graduated with a B.S from Johns Hopkins University and spent a year working in Jamkhed, India.



Finished products awaiting their new owners.

Dear Tenzin

By Gilbert Lam

Dear Tenzin*,

"Doctor, why am I so short?" you asked me with your innocent, yet thick accent that immediately exposed your rural Indian heritage. Although you were only eight years old, your face appeared weathered from the same eight long years of harsh climates. You—like the 500 other children I was performing health screens on—had obviously grown up in Rinchen, a remote village nestled 13,000 feet high in the Himalayan Mountains, isolated from the rest of India. It was only my first week working with your community, but the answer to your question was immediately obvious to me. I—having grown up in a first-world, educated society and now studying medicine at a first-class Canadian institution—suspected a diagnosis of stunted growth secondary to malnutrition. In my medical textbooks, the reason was simple enough: your nutritional needs were not being met by your intake. Before I could respond to your question, though, you had already run off to play ball with your friends.

However, over the next few weeks I spent with you, I realized the answer to your question was much more complex than I originally thought. That summer, my official role was to improve the community's health by treating infections, developing greenhouses, implementing health workshops, and assessing water sanitation. As you know, due to harsh winter climates, Rinchen is physically inaccessible and without external sources of food for seven months of the year. As a result, you and your friends live chronically with anemia because of iron, folate and vitamin B_{12} deficiencies. As you know well more than I, Rinchen has been dealing with significant cultural, economic and political barriers to good health. Your innocent question inadvertently taught me a profound lesson: you weren't short because you were just a poor eater, but rather, your growth and development were stunted by your social determinants of health, over which you unfortunately have no control.

"Why am I so short?" I, too, remember asking myself as a child. Like you, I had also been the shortest boy in my class. Like you, I also was an eight year old boy bursting with curiosity, imagination and innocence. However, so many other parts of our childhoods

seemed different. My childhood was not overcast by extreme poverty and hunger. My right to primary education was never threatened. My childhood was not inflicted with chronic diarrhea, malnutrition nor persistent anemia. Surviving past the age of five was expected for me. In fact, I celebrated my fifth birthday with cake, stickers and presents. So, when I left Rinchen, I felt sorry for you.

Upon my return to Canada, though, I have felt grateful for you. Tenzin, I wish you knew how you have shaped my perspective of life. I went back to medical school in Canada and started to see patients in a new light. While caring for the sick baby in the Intensive Care Unit, the suicidal teenager in the Emergency Department, or the palliative grandfather on the hospital ward, I have continued to learn firsthand that patients' problems are never purely medical; they are socially confounded as well. The true 'treatment,' to your anemia for example, is never just a medication we can easily prescribe; we must also address the social circumstances and home environment to foster healthy growth and development. This, in fact, has been an invaluable lesson. Although medical school has taught me the complexities of the human body, I now believe wholeheartedly that the social determinants of health must also be addressed to allow children like you to grow healthy and strong.

Tenzin, I have spent many a time thinking about our experience together. Through our time playing volleyball and cricket on the courts, going for walks around the schoolyard, and drinking chai together, you showed me how you 'cool' you truly were. As you told me stories about Buddha and its importance to your culture, I was impressed at your openness to share your beliefs with me. You have taught me that no matter our cultural backgrounds, our religious beliefs, or geographic location, we must understand the backgrounds of our fellow human beings to advocate for each other, and make the world a better place.

You have inspired me to work in a field called global health. As I graduate from medical school this year, I am committed to helping alleviate the injustices of our world, starting with children—our hope for the future. I will be pursuing specialty residency training in Pediatrics, to better equip myself with the skills to advocate for children's health. You have inspired me to continue caring for children in low-resource settings, ultimately becoming a "Doctor Without Borders." I went to the Consortium of Universities for Global Health conference last year, where other people shared their work in global health and the lessons they took home with them. I realized there are lots of other passionate, compassionate and empathic people who are fighting to make the world a better place. With this inspiration, I returned home and worked even harder with the Canadian Federation of Medical Students at encouraging global health opportunities for other students. Ultimately, I want to continue working with these passionate people and contributing to society by fighting for children like you and your basic rights to healthy lives.

I am sorry that you never received an answer from me about why you are short. In some ways, I still don't really know. However, I am writing you this letter to let you know that you have changed my life. Your question taught me about the social determinants of health, the importance of curiosity and the hope that you carry for the future. One day, I hope to return to Rinchen and meet you again. Until then, I just wanted to thank you for making me a better doctor.

Thank you for making me a better person.

From your friend, Gilbert

*Tenzin is a pseudonym and a common name for many of the children in the Spiti Valley.

Gilbert Lam is a Pediatrics resident at Children's Hospital of Eastern Ontario in Ottawa, Canada. He is a 2014 graduate of the University of British Columbia Medical School in Vancouver, Canada.



Spiti Valley in the Himalayan Mountains, where health screenings were conducted.

Photo Credit: Gilbert Lam

It Takes Some Getting Used To

By Christina Liao

"Fo-fo-LAY-shing."

"What did he say?"

Our new biochemistry professor was talking about enzyme regulation – phosphorylation to be exact. Most students found at least half of his first lecture to be unintelligible. Despite the sniggers, we still called him "professor" when we asked him questions. For the individual student, it was hard to tell whether the snigger or the deference was hypocritical. He turned out to be our favorite lecturer of the semester; he just took some getting used to.

In the December 2012 issue of *The New Physician*, Drs. Vanessa Parisi and Edward Cho wrote an article about the importance of cross-cultural simulations to prepare medical students for experiences abroad. Though a fair number of medical students still aim to be plastic surgeons in Boca Raton, a growing number of aspiring physicians have their eye on global health. The world is shrinking. There is a growing awareness that global health issues are germane to the individual doctor's practice, and rightfully so. But global health practitioners aren't cultivated overnight.

Any attempt to adopt a nobler, broader perspective about medicine must be built on the foundation of integrity: consistency between attitude and action. A physician's day-to-day conduct, his minute-to-minute life attitudes, will influence his actions, regardless of how good a game he talks. What is he like in the midst of uncomfortable cultural clashes? What is he like, for example, when studying in a foreign country with a professor who has questionable English pronunciation?

What my classmates and I learned this semester was that cross-cultural endeavors – medical or otherwise – take some getting used to.

We had committed to studying medicine in China before receiving further clinical training in New York. Instructors in the English program at China Medical University (CMU) were high-ranking professors in their respective departments with a wealth of experience and several publications under their belts. CMU gave us its very best. We

gave CMU the snub. Our initial response to our professors was typical of native English speakers; we let our derision of their pronunciation color our view of their competence.

After a week of mocking mispronunciations, a few of us got together, reflected, and recognized the gross impropriety of our attitudes. Who were we to look down our noses at our professors – these men and women who have accomplished so much, and in a second language? How many of us could carry on an intelligent five-minute conversation in another language, much less give two-hour medical lectures on a weekly basis? How could we expect to be culturally sensitive contributors to global health discussions and medical mission teams if we couldn't learn to appreciate a teacher whose only academic shortcoming was his pronunciation of English?

There is a lot about China that takes a lot of getting used to. But of the world's developing countries, China is arguably the most comfortable to live in. As medical students, we all want to help people, but it only took a little prick of discomfort to cause our borderline racist, intolerant attitudes to leak out. We needed to rebuild the integrity of our cultural attitudes. We couldn't claim to aspire to become global health practitioners and not be able to practice understanding, tolerance, and humility in day-to-day life in a foreign country. Our shame was a strong motivator for our reversal in attitude.

The path to being culturally sensitive is tricky; it takes some getting used to. We have to make a conscious effort to examine our attitudes and resist giving in to knee-jerk reactions. When street vendors overcharge us, is that an issue of justice or culture? When the school announces schedule changes last minute, is that an issue of administration or culture? When a professor seems reluctant to take questions in class, is that an issue of personality or culture? Many of these questions have no straightforward answer. And even if an answer is arrived at, decisions about the appropriate response can be even more difficult.

For young medical students like us, it is enough of a challenge to make ourselves continue to ask questions. Keep asking, we challenge each other. Continual examination, rejection of complacency, asking questions – isn't this an integral part of being a medical practitioner? As we challenge ourselves to keep examining our attitudes, we've concluded that continually asking questions is crucial to being a global health practitioner as well. Drs. Parisi and Cho would say that we have it made. We get to engage in cross-cultural simulations every day.

Constant self-examination feels like the middle of a marathon, in which we both recognize the progress we have already made while acknowledging the work left to be done. Giving everyone the benefit of the doubt is a \$500 buy-in at a no-limit table. Humility is an itchy wool sweater. Willfully subjecting ourselves to this constant discomfort seems pointless at times. But many of us are hoping to do great things, like "serve the underserved" and practice "medicine without borders." We're learning that at

the heart of these great missions exist individuals who've accepted the daily challenge of practicing understanding, tolerance, and humility in cross-cultural contexts. We want to become those individuals.

A few of us have decided the discomfort is worth embracing. This marathon is worth running. The \$500 buy-in will teach us to stay generous in our assumptions, especially when these assumptions concern patients and providers from different cultural backgrounds. And that itchy wool sweater will keep our hearts warm, remind us we don't have all the answers, and make us better equipped to contribute to global health discourse as we approach it with a learning attitude. Knowing that our present discomfort – living and studying in a foreign country – will make us better global health practitioners is actually quite comforting. Because at the end of the day, it all just takes some getting used to.

Christina Liao is a medical student at China Medical University.

Leaky Pipes

By Melissa McCoy

Drip.

Drip.

Drip.

Sweat poured like a river out of my pores, streaming down my back as I tugged at the giant tumor with my trembling hands. I held the soaking monster out of view of the surgeon as he meticulously tied one-handed knots around the neck-vessels threatening to burst.

Drip.

Drip.

The patient's blood puddled on the stained floor, swirling into a tributary on its slow journey toward the drain four feet away.

Drip.

Drip.

The mold-encrusted air-conditioner gasped, desperately attempting to expel air. A three-inch spider scuttled past. It sank in that I was far away from my pristinely sterilized, disposable-everything, rigorously documented surgical rotation in a world-class teaching hospital.

I focused on this mother of six, with her soft dark eyes, wisps of gray starting to appear in her tightly braided hair. I held her hands before the anesthesia took hold, and remembered how rough and strong they were, hands that told a story of harvesting manioc and groundnuts. I needed her to be strong right now.

More blood dripped.

Her massive tumor, a surgical "zebra," was caused by iodine deficiency (a rarity in my own country). How ironic, I thought, in Sub-Saharan Africa, land of the zebras. I had to remember she was one of the fortunate ones with the meager funds to receive treatment. As I placed a drain and sutured the gaping incision back together, I imagined

sewing the broken pieces of her life back together, in this drippy hospital, a part of a gushing broken system.

Drip.

Drip.

Drip.

The bleeding stopped as I applied pressure to the dressing. All bleeding stops eventually, the detestable surgical mantra chimed in head.

I walked home, still dripping in sweat, thirsty and exhausted. I was still not accustomed to the baking sun of the dry season of the southern Sahel. A crowd gathered ahead of me on the road. A broken pipe jetted water into the air. The pipes here are practically constructed for failure. Brittle plastic pipes, which beneath the dirt road, are exposed by erosion from rainfall. With time, passing vehicles inevitably rupture the pipes leaving all those downstream affected.

Precious water snaked its way toward my Cameroonian family's little home at the bottom of the hill. Where does the blame lie in a cracked community water main? Who would pay for this damage and the strain it caused? Surely working through this together would be more useful than making accusations, as was now happening. For now, assigning blame was a purely human response in the face of stress. The exasperated crowd looked on with voices escalating and fingers pointing.

The next morning on my walk back up the hill, the water still flowed, my sweat still dripped, and my mind brimmed with questions. How was my dear patient recovering? Would the 54-year-old with charming crow's feet and the soft, French-speaking voice I had listened to so attentively still remember me? When I arrived, I glanced to her bed. She was nowhere to be found. Odd. My heart pounded. Where had she been transferred?

A vital pipe had burst.

She died in the night.

The German surgeon tensely explained to me he was sure the nurses had been negligent. The nurses found her after the vessel in her neck had ruptured. They desperately grabbed sponges, removed the drain to divert the flow away from her airway, and did the best they could with what they had. It was too late.

Had the nurses been negligent? Perhaps they would tell a different story of poorly written job descriptions, inadequate training, and corruption that had led to missing paychecks for the last five months. This system was leaking in so many places; it was practically constructed for failure.

Drip.

Drip.

Tears streamed onto my green surgical scrubs. My heart threatened to burst, pounding so hard I was sure it would be overheard. Overwhelmed, I sank into an empty

rust-covered wheelchair in the cluttered corridor, sobbing. This scene would have played out so differently at home. Anger was palpable in the air around me.

On my way home, the crowd still surrounded the burst water main. Now using buckets and bottles to detain excess water, my neighbors made the most of their scarce resources to alleviate the issue. I wondered, who was responsible? Maybe the manufacturing company was at fault for making such weak pipes. What about the driver who ran over the pipe? Maybe the leak was just another consequence of a government failing to invest in infrastructure for its citizens. How could my neighbors, women selling 10-cent bags of groundnuts for a living, solve all these problems?

Likewise, who was responsible for the tragic death of my humble patient? Was it the powerful surgeon, giving commands from the high ground? Was it the overworked nurses, trying to follow the post-op orders from below? Maybe the lack of functioning equipment was to blame. Looking closer, maybe it was the hospital itself, a for-profit institution selling health as a commodity rather than a human right.

The desire to pinpoint blame is powerful and instinctive. Shifting culpability to those downstream makes life easier in the short term, but our ultimate challenge in healthcare is difficult, one that requires moving counter to the current. To ensure quality healthcare in all parts of the world, we must discern and address the core issues fueling the current problems. Though multifaceted, the roots of these networks of blame can be traced back upstream to power and privilege. Acknowledging a steep gradient of personal agency, we must recognize where the streams of privilege have historically flowed.

Drip.

Drip.

Drip.

Privilege and power do not easily trickle down. The memory of my humble patient has inspired me to charge upstream, alongside nurses and neighbors, in more authentic partnership. We must work toward more a cohesive system, one that starts with the problems upstream, in order to stop the hemorrhaging downstream for the ultimate realization of a world with fewer leaky pipes.

Melissa is a 4th year M.D. candidate at the University of Minnesota Medical School who plans to focus her career on global health and social medicine education.



Entrance to the operating theater in the Cameroonian hospital.

Photo credit: Dr. Amandine Schaller

Stigma, a Sex-Change, and a Bank

By Ambar Mehta

I followed Mungala through the narrow alleyways of the unsanitary, claustrophobic slum. My senses heightened with a growing fear of my surroundings, a fear only augmented upon finally arriving at the clinic. Used syringes were scattered across the floor, dead insects floated in the water basins, and the odor from dirty bed sheets permeated the air. Mungala, a 17-year old transgender working in the commercial sex industry, wanted a sex-change operation.

I first met Mungala when I helped design a vocational training and microcredit program for the transgendered community in the slums of New Delhi. After learning that begging and prostitution were the main income sources for most transgenders, my team sought to help them develop skills and start profitable ventures. While this initiative failed in the end, the entire experience reshaped my understanding of working in developing communities. Hearing Mungala's story and working with him challenged preconceived notions of mine about those living in indigent communities.

Like Mungala, most transgenders in Delhi are marginalized from society and face pervasive stigma. Schools refuse to accept them and physicians deny them care. Others suffer from physical abuse at the hands of police officers. As a result, it is not uncommon for transgenders to resort to injecting drug use; the cheap price of heroin helps alleviate the mental distress and physical pain that plagues them. My first understanding for how society's discrimination further affected Mungala's access to care came at the aforementioned clinic.

Mungala was approaching an unlicensed surgeon as a last resort for his sex-change. Unsurprisingly, the surgeon possessed no documented certification. The entire cost for this complicated surgery amounted to a mere \$150 dollars, substantiating my concern that Mungala would not be receiving adequate medical care. I begged Mungala not to proceed, but he wouldn't listen. I found out later that after discovering Mungala was HIV-positive, the opportunistic surgeon tripled his price. Finally, Mungala changed his mind.

But what if Mungala had gone through with the operation? Many others do.

The unlicensed surgeon's behavior was the epitome of unethical practice. He took advantage of a patient's social status and charged exorbitantly without the guarantee of either proper medical procedure or necessary post-operative care. This was my first time witnessing the insufficient level of medical care often available to impoverished individuals.

I still could not grasp why Mungala wanted to spend his hard-earned savings on a sex-change operation. Wouldn't investing his money in food, clean water, and necessary medications be of greater utility? My curiousness eventually turned into frustration. Whenever I nudged Mungala to spend his savings on these life necessities instead of his sex-change, he kept dismissing my advice. However, these encounters taught me the greatest lesson during this entire project – to practice what is commonly called 'cultural relativity' when working in developing communities.

Practicing cultural relativity requires understanding that a culture is coherent, rational, and organized within its own context. Pertaining to this experience, it meant outsiders like me needed to first delve further into and comprehend, without judgment, the priorities and beliefs of Mungala's community. Looking back, I now realize that pushing Mungala to carry out an activity based solely off of my beliefs resembled a form of unacceptable patriarchy.

I began asking Mungala to elaborate his views regarding a sex-change. For him, a sex-change brought several benefits including reduced discrimination, as he would technically no longer be considered a homosexual in his homophobic community. Others were the opportunity to charge more to his commercial sex clients and improve his social standing within the transgender community.

I realized that Mungala prioritized this operation because of the gains he believed it would have on his financial, social, and personal life. His viewpoint illustrated how medical care, stigma, religion, and societal standing were all interwoven and influential in his decision-making process. It now became clear that when looking at the health of a community, one cannot disregard non-health related social factors and must always aim to understand the community as a whole. With this in mind, another encounter unraveled key interactions between Mungala and his community.

I accompanied Mungala to a local bank; he needed to open a checking. They refused. Quick glances at Mungala prompted bank staff members to shove us from one counter to the next. Frustrated, we requested to see the manager. His nonsensical attempts to send us away culminated in his claim that Mungala carried an invalid identification card – a hollow excuse. Mungala was unable to open a bank account.

Getting denied his right to open a checking account was merely one of many insults Mungala had to endure at the bank. As soon as we set foot inside the premise, countless unfriendly stares *un-welcomed* us. It was obvious that many never expected that a *hijra*, the local discriminatory term for transgenders, would enter a bank. Some of this negative energy shifted towards me as I associated myself with Mungala. This experience humanized countless statistics about discrimination we all hear and read about occurring in India and in other parts of the world.

Interacting with the bank manager also taught me that impoverished individuals are in a harder position to fight for their rights. Together, Mungala was able to speak to a manager, but if alone, he may have left the bank sooner along with a greater sense of defeat. Those of us in a privileged position to yield change have a moral and social responsibility to advocate for those who have little to no voice.

Even though time pushes these experiences further into my past, the lessons I learned are engrained in my psyche and stay at the forefront of my present-day endeavors. Mungala redefined my professional aspirations, and helped me mature my view on the social determinants of health. His story serves as a reminder of why I want to fight for his right to health. When I left Delhi, Mungala compassionately hugged me good-bye. Now, several years later, I regret the missed opportunity to tell him how much he impacted my life.

Ambar Mehta is a second year medical student at Johns Hopkins. His career aspirations are to work with underserved communities, improve their health, and prevent and alleviate human rights violations.

Bystander

By Marta Michalska-Smith

As an undergraduate I traveled to rural Tanzania. The suffering I would witness in this dusty mountain town set among the Udzungwa Mountains of Eastern Africa was in painful contrast to the beautiful landscape and friendly charisma for which the Tanzanian people are so well known. It was against this backdrop that I encountered human depravity in profound ways and had the humbling experience of recognizing depravity within myself as well. Yet, with the help of others, I came away from this experience with a heightened sense of awareness of the importance of community in maintaining ethical standards.

Within the white-washed walls of the wards I witnessed many traumatic events that affronted my conscience. The most terrible of these occurred in the maternity ward. Here, I witnessed a nurse brutally abusing women in the midst of labor. Unable to comprehend Swahili, I was nevertheless able to understand the universal language of violence. The nurse hit and slapped the girls and splashed vaginal blood in their faces, all in an effort to have them push harder. At first, the women would protest and fight against her lashes, but trying to kick the nurse away resulted in a beating to the face, and shouting only encouraged further torments, such as twisting the inner thighs with surgical clamps until they bled. With no family members present to defend them and exhausted from the efforts of labor, resignation would eventually sweep over the girls, and their faces would take on faraway looks—meek and submissive. Somewhere in the back of my mind I recalled a scene from a book I had read as a child, of a horse being broken: lashed and beaten until its spirit gave way.

As the abuse continued for hours, you could have seen me standing by the wall—silent, motionless. Tanzanian doctors and nurses came and went witnessing the same behavior and not intervening, so what right did I have, a foreigner, to do otherwise? Was I witnessing a cultural difference or a sickening crime? The fact that I would try to rationalize, even for a second, that the acceptance of such treatment could be a matter of culture still haunts me. If I had kept this debilitating experience to myself, I believe

I may have remained there—paralyzed, afraid, and voiceless—but I had a confidant to whom I could go: Sister Mary, a physician-nun with whom I was staying. Upon hearing the story, Sister Mary was affronted and encouraged me to share what I had seen at the following morning meeting, in front of the hospital staff. I was sick with dread. So many others, people who were my superiors and part of this community, had witnessed the same behavior. Why did I need to be the one to say something—the one mzunqu or "white person" among them? Would I not be insulting them and embarrassing the head of the hospital in front of his colleagues and employees? Should I not instead go to him personally? Yet, Sister Mary worried that revealing the situation in private would do nothing to end the abuse, and so trusting in her advice, I did as she suggested, sharing what I had seen with the nurses and doctors the next morning in one of the most uncomfortable moments of my life. After the murmuring died down, I was given assurance that the behavior would come to an end. Years later, my stomach still turns in knots when I recall that meeting, and I wonder if there was a better way to have handled the situation. But more than this, I wonder how it was possible for me to have been so confused, so paralyzed, so impotent in the midst of such atrocity.

As I reflect on this experience, I become increasingly ashamed at my failure to recognize what I was seeing as abuse while it was happening. Was I not a person who was so easily angered by social injustice, who so loudly and confidently spoke out about our shared responsibility? And yet I was there, in the very room where injustice was taking place, and I responded with fear and silence, the result of which was hours of preventable suffering. As I recall my own confusion that day in the ward, I no longer feel so innocent and separate from atrocities that have occurred throughout history and continue to happen today. I am no longer ignorant of the fragility of human nature and the influence of rhetoric and power, nor of my own susceptibility to these forces. It was not until I could reflect on what I had seen with someone else that I found the clarity I needed in order to act. I was humbled and ashamed, but also awakened. I saw with new understanding the importance of dialogue when addressing ethical issues. Sister Mary's reaction gave me the confidence to know that my inclinations were justified.

The abuses I saw were not acceptable to the people there, and yet there were silent forces at play that allowed it to go on unchallenged. I believe these forces, present in all communities, are the result of institutional norms and expectations, and are perpetuated by a rejection of conversation and dialogue. In order to further unpack my experience, I am attempting the work of naming these forces that so paralyzed me that day in the hopes of coming to understand their origin and what allows them to have such power. I want to be able to recognize these forces in the future – whether as a medical student or a young physician. Medical culture has its own set of institutional norms and expectations, with a strong history of upholding a social contract with the community it serves; one

grounded in integrity, accountability, competence and promotion of the good. Yet, the same culture that upholds these values is also marred with elitism and power, making the profession vulnerable to perpetuating injustice.

Tanzania is not the only place with broken systems. The world of medicine today is plagued with institutional violence toward certain populations and hierarchical structures that allow for abuse and negligence of the most vulnerable. Culture, tradition, and community are powerful forces that can safeguard sacred values, but they can also convince people of their dominance, entitlement, and right to oppress.

Like the women in the clinic that day, in some ways I too was broken. My experience gave me the knowledge that I *can* be broken, and that alone is powerful. As one person up against prevailing systemic forces, I am likely to break again, and it is for that reason that I seek to engage others, not standing alone, but joining in the effort to build a system which encourages and supports compassion and empathy.

Marta Michalska-Smith is a second-year medical student at Loyola Stritch School of Medicine. She received her BA in Philosophy at the University of Notre Dame.



Waiting for the doctor. **Photo credit:** Marta Michalska-Smith

Lessons in Walking

By Ryann Milne-Price

Marael and I got bored waiting for the driver to weld the bumper back onto the taxi brousse⁵. Plus, I was tired from my worm medicine, and him from his schistosomiasis, so we decided to go by pirogue⁶ to Evatra the next day. We bought shrimp from the market and walked home to the NGO camp. I was the only volunteer left after a summer of public health work, and Marael – on staff at the NGO – had agreed to travel with me for my remaining week.

As I stirred the tomatoes over the fire, I asked Marael again about spirits. He kept saying, "Later," and then I would bring it up again.

This time he sighed, "You are too clever, you always remember."

Spirits, he explained, want you to follow $fa\partial y$ (in Madagascar, something is $fa\partial y$ if it is considered taboo; conversely, one "follows" $fa\partial y$ by avoiding doing anything that is taboo). As a boy, three spirits followed him each day from school to his grandmother's banana stand. His grandmother was a healer, and she had many spirits working with her. When his mother found out that Marael had started seeing the spirits, she told him to stop following $fa\partial y$.

"Life as a healer is too hard," she warned him.

So Marael ate pork and stayed out late at cockfights. Eventually, the three bright forms deserted him.

After dinner, I went to the latrine to evacuate more roundworm babies. When I came out, Marael was dragging my tent through the sand toward the schoolhouse.

"What?" I said.

"The guard is drunk."

Marael notices everything. Even when I think I'm being so subtle, he can tell when I'm sick, when I'm scared – he knows what I need before I realize I need it. I imagine

⁵ Bus

⁶ Wooden canoe

that this is what a good father would be like, or a good doctor, although I hadn't yet considered becoming the latter.

We wedged my tent through the schoolhouse door. Across the dimming thatch and concrete, he looked tired. He checked each window lock. Soon he disappeared – as he always seemed to do – to walk the littered trails home.

Between the two of us – Marael was constantly hungry and my newly worm-free body was now ravenous – we spent the majority of our time in Evatra walking between coastal villages in search of food.

His aunt, after selling us sweet potatoes, asked him, "Is this your girl?"

"No," he said, looking bored, "She's my boss."

But later, as we bargained for a pirogue ride, he launched into this longwinded story about how I was his sister from another father, delicately explaining why I'm not really a *vazaha*⁷. Mortified, I hid my John Deere cap behind my wrap skirt, afraid to protest in English and blow our brilliant cover. He pointed to the sweet potatoes I held, explaining in Malagasy: See, she even *likes* sweet potatoes. I shifted behind him like a huge pale elephant.

We decided to set up our tents in a pretty little cove about a mile outside Evatra. On the last legs of our village-walks, when the sun pinched below the sea, Marael gave me lessons in walking by moonlight. You have to feel your way along, he'd say. The grass was silver, the trail black. Everything was in shadow: rock-shadows, wave-shadows, bush palm-shadows. He was afraid to use lights but wouldn't tell me why.

Skirting one village, the wind picked up. Babies cried and people hurried around with a different energy. Maybe the bandits had returned, I thought, but I didn't ask him, because I knew what he would answer.

Back at our tents, someone leaned in shadow near our tree-kitchen. I jumped, but Marael greeted him, almost too quietly. It was the old man who lived by the cove. He was wrapped in a blanket, holding his spear. He had come to guard our tents. Up from their house, his wife was carrying a plate of food. Marael and I watched her pick through the dark along the cove, amazed.

As he always did in situations I had no cultural knowledge about, Marael asked me what we should do. Often I amused him by making a few suggestions and watching his reaction. But ultimately I'd have to say, "You know, you can be the boss too. Just say what you think is best."

He'd get this disgusted look on his face, then:

"No. You need to become more clever, little sister."

⁷ In Malagasy, *vazaha* translates to foreigner, rich person, or baby. It is most commonly used to mean the first, or so I was led to believe.

This time, we decided to make the old couple a second dinner. We brought it down to their house, proud of our creation despite the rainstorm shaking our tent-kitchen. I fumbled on their doorframe trying to crouch, eject my sandals, and present the food all in one swoop.

Once I gathered myself, I looked up. The old woman sat poised by the little fire, her eyes bright like the sea, like they derived from water.

Walking home along the beach, we watched dark red crabs zigzagging.

"Look!" Marael said, pointing at a pink one. "There's a vazaha crab!"

It was unpredictable, the times he brushed over my *vazaha*-ness, and the times he made a point of it. It felt like no matter how close we were to become, it would only allow us to connect at certain points, like the tips of octopus arms kissing.

Once, walking on a busy street, he pulled me away from a hole and said,

"Sorry, niece. Sorry to touch you."

Suddenly angry or brave, I spun around,

"I am not crystalline! I can be touched."

I watched his face change then, amidst the dust and crowd. Was he sad? No, he thought I should be more clever, to know this already. Maybe not crystals, but I am made of something different.

The last day in Evatra, as we walked away from our cove, I said,

"What if I wasn't a vazaha? What if I was Malagash? What would I be like?"

He thought about it and said, "You would weave the most beautiful mats in the village."

"A weaver? I'd be a weaver?" I was clearly disappointed. "What about that revolution you want to start to help the coastal people – couldn't I start that?"

"Girls don't become bandits."

We walked along for a while, watching the light fade across the boulders.

"So what would I be, if I was a vazaha?" he asked quietly.

Each night Marael would say to me: just wake me up for anything, niece. If children discovered us while we ate, he'd offer the fish we'd spent the whole morning acquiring. Afterward he'd turn to me and say, "Did you see that girl's eyes? It is like: the world is trying to make itself more beautiful while she watches."

I realized, then, how actively he loves people. I wonder how many decades it would take to turn one's focus so entirely on others. Maybe the three spirits made him very old.

"You'd be a doctor," I suggested. "Maybe, a doctor for children."

"You are becoming more clever, sister," he said. "Yes. That is exactly what I would be."

Ryann Milne-Price is a MD/MPH candidate at the University of Washington.

Cancer and Its Illegal Disparities

By Ilse Paulina Montes De Oca

"No, I don't want to die!" I yelled as I jumped off the hospital bed. I vividly remember that moment on November 7, 2000 that shook my entire life, leaving behind shattered pieces filled with sadness, pain, frustration, confusion, fear, and cancer. Quietly and with minimal facial expressions, my pediatrician entered the room, followed by a translator. He sat directly in front of me and said, "I've seen the X-rays and have come to a diagnosis. What she has is not pneumonia, but a cancerous tumor. The tumor is on the left side of her neck and liquid from the tumor has spread out, down her chest and reached her lower abdomen, involving her left pleural cavity and reaching her upper left side kidney, as easily seen in the X-rays." At that time, I was too young to understand the migratory system, and that lacking a social security number or green card would jeopardize whether or not I received treatment.

Twenty-one years ago, my parents migrated to the United States from Mexico. I was six months old and was carried in my mother's arms across the border. My parents placed themselves in a situation of suffering to adapt to a new culture and learn a new language. There was no other option to better my future. Schooling in the United States was the beginning of my understanding of what it meant to be a migrant. My early childhood years consisted of only speaking Spanish, immersing myself in what was left of my Mexican culture, and being placed in English as a Second Language classes. I disliked being surrounded by English-speakers and blond-looking individuals in elementary school. They represented what society considered "American," something I desired to be and was not.

By the time I was diagnosed with cancer, my parents had already embraced American practices into their lives. They had learned to survive despite our illegal status. My parents now worried about the expenses of treatment since the medical coupon was reluctant to keep covering my expenses. My mom was unemployed and my dad had to go back and forth on weekends during the snowy days of November and December. My dad was obliged to commute to maintain his job, as finding another would be difficult with his

undocumented status. While these trips secured his employment, the long commutes put his life at risk. One early morning while driving at 5AM through Snoqualmie Pass, he got into a car accident. His truck slid and turned over several times, leaving him trapped and suspended upside down. It was a miracle that my dad survived after kicking through the back window of his truck.

While I was fighting for my life, I was not only learning about biology and my body, but also about the healthcare system and my denial of access to it because of being undocumented. Long conversations with social workers and lawyers became the norm, but remained unsuccessful. My parents and I were given little hope of citizenship. After applying for legal residency in March 1997, the wait continued. With it came the denial of medical coupons and high monthly premiums of health insurance. Hospital statements became a harsh reality indeed.

I transitioned from a fourth grader learning in a classroom to receiving bedside tutoring. I felt the most comfortable among bald peers. They were the only ones who did not judge me for the way I looked as a result of treatment or discriminated against me due to my lack of a social security number. My schooling was affected. The transitional phase I was living in caused me to fall behind. Fifth grade consisted of weekly absences, fainting, and many hospitalizations. I became known as the "girl with cancer" among my peers, was obligated to wear facemasks to protect myself from airborne diseases, and was the only one allowed to wear bandanas and hats inside the building. School became a challenge to adapt to because I had become so accustomed to being hospitalized and having little peer interaction. Physically, I was disabled, having to fight long-term side effects of medication and having to regularly follow up with a dietitian, physical therapist, and psychologist.

High school had to be completed with perseverance. Academically, I needed to be outstanding to qualify for a four-year university. The fear of not being able to afford college and being aware of the limited funding for undocumented students placed me in a position where I had to cut down my extracurricular activities and turn to employment. After school hours my junior and senior years, 3:30pm-10:30pm, I worked in a Mexican bakery. When there were no clients, I would find myself quickly reading my textbooks, working on worksheets, or memorizing vocabulary words. Finishing my shift at work did not mean rest; instead, it consisted of completing my homework. Senior year, I sacrificed my lunch break and mingling with friends to work on college applications and scholarships. My summers consisted of waking up at 4am to work in the fields tinning apples or working the cashier at warehouse fruit stands. After my shift was over around 2pm, I would quickly shower, eat, and go off to work another 6 hours at the bakery. I placed my health at risk with the exposure to pesticides, but my fear of not reaching my

professional goals was greater. I had never felt so much pain and soreness in my feet; placing my feet in hot water with rubbing alcohol became a nightly practice.

Now, after 12 years of living cancer-free, I am left with lifelong required preventative care and medication for hypothyroidism, which is one of the various long-term side effects of the cancer treatment I received. Possible future side effects including heart disabilities and an increased need of dental care are a reality, not to mention the yearly follow-up appointments. These side effects can have non-retractable consequences if not closely monitored throughout my life, but now actually having those nine digits of my social security number will hopefully ensure easier access to a better future.

Ilse Paulina Montes De Oca is an undergraduate student at the University of Washington. Majoring in Early Childhood and Family Studies.

Freedom From Want: Reflecting on Migration and the Brain-Drain Phenomenon

By Phillip Nguyen

"So, dad, I've decided to go to Saigon."

"Did you now?" My father asked, pausing for awhile on the phone. "Well that's good for you. Some how fitting." He laughed, politely.

The irony was not lost on either of us. I was about to return to Vietnam as an American trained doctor after my father—a Vietnamese doctor—had left the country many years ago. I was completing a cycle of coming and going, I thought, reversing the brain-drain, however briefly. I have often thought of the brain drain — a phenomenon where skilled workers, having been trained in one part of the world, leave their homes for better opportunities elsewhere — through the lens of labor and health economics, where health workers and the services they provide are more neatly reduced to commodities to be regulated and distributed. As I pack for my flight, however, the brain drain began to feel incredibly personal. As researchers and academics, rarely do we ever talk about global migration and its consequences in terms of our colleagues or ourselves.

But I remind myself migration has always been a personal story. My story began not when I was born, but eight years prior, in 1975, at the end of the Vietnam War. My family then lived in one of the many small townhouses nestled within the many twists and turns of the former French colonial city known as Saigon. Much of what I know from that era came from my aunts, who recounted the early days of communist rule as being fraught with fear: fear of past associations, fear of reeducation camps, fear of spies as neighbors. My grandfather supposedly burned many family belongings: from flags, to clothes, to French and English books, mutilating photos of our past, leaving images with headless torsos and severed handshakes. My father at the time was a fourth year medical student in Saigon. When that last helicopter flew from the American Embassy on April 30th, 1975, medical students like him were told to go home. His future and his dreams were put on hold. For a moment there, time stood still for millions of Vietnamese as uncertainties abounded.

When I read about the brain drain, I see a tendency to make sweeping assumptions about societal influences to explain the pushes and pulls that influence migration patterns. Sometimes, that is sufficient. Thousands of professionals, such as teachers, engineers, nurses, and doctors, fled Vietnam in the immediate aftermath and in the years that followed. The big forces, like war, violence, and persecution, are largely responsible for shaping some well known migration patterns. Reducing our thinking of the reasons for migration to macro forces is a reasonable effort toward understanding the phenomenon and advocating for better public policy.

But not all migration result from those readily identified macro forces. My father ended up staying for nearly 20 years only to leave Vietnam in the early 1990s with my mother, sister and me. The forces that kept us were at times emotional, other times familial, and too often, bureaucratic. To this day, I can't fully explain them. But I see these nuanced forces all around me, all the time. As providers, we all have worked with, depended upon, and befriended the Nigerian physician's assistant who uprooted so her children can go to college, or the Filipino nurse who migrated to make more money to support her ailing mother, or say, the Russian therapist who left in search of the freedom to love without persecution.

The choice to migrate is often difficult and subjective. And there's the rub: what pushes and pulls people like my parents—or your parents—to migrate, sometimes at great personal peril, are *often* complicated and personal. They can't all be explained by the macro lenses we use, but that doesn't make these reasons any less powerful or deserving of protection. Reductionist thinking here misses the nuanced forces that influence migration, and make us forget that migration at its core is basic right, a logical extension of the freedom from want and self-determination that form key principles of a free world.

And what about those who stay? To mitigate the effects of the brain-drain, how can we better understand and encourage health workers to stay, not out of coercion but choice? For nearly twenty years, my father was part of the generation that stayed. Collectively, these are the health workers who rebuilt the Vietnamese health system, one vaccine at a time. They humble me with their outsized achievements despite miniscule resources. One doctor I met, now retired, spent his days translating medical texts from English to Vietnamese, piloting breast-feeding public education campaigns, and writing the Vietnamese version of *Dr. Spock's Baby and Child Care*.

I asked him what he and others like him needed to continue their work; what can I do as a doctor to help? Thinking back, various policies to stem the effect of the braindrain have been utilized, and they vary in complexity and scale: from training more midlevel providers to improving local practice environments. But it wasn't money, it wasn't prestige, it wasn't resources that he said he needed, though I doubt they wouldn't

be welcomed. "A sense of shared enterprise," he told me. I kept thinking about what he said. He was tapping into something deeper, the sense of connectedness between health providers who have all taken similar oaths to care for the sick and heal the wounded. The loss of connection to one's colleagues, once they had left, must have been hard. For him, I could only imagine, to stay behind may have felt like being left behind.

This feeling is not inevitable. We have as much a responsibility to advocate for our colleagues across the seas as for our patients, to respect their right to migrate, to push for better practice environments, and to uphold the fellowship that comes with choosing a life in service of others. Through organizations like the Consortium for Universities in Global Health (CUGH), we can build more partnerships, sponsor exchanges, and give existing professionals more access to point-of-care resources and continuing education. These acts can help alleviate, in part, the burden of global health workforce training currently shouldered by developing countries. They also build bridges that bring us professionally closer together. In doing so, we can give voice to the experiences of health workers in policy discussions and humanize the brain drain beyond talks of people as commodities to be regulated and controlled.

I don't pretend that my budding career in global health is giving back the equivalent of a clinician with 20+ years of experience like my father, but my family history has done much to inform my perspectives. Reflecting on my experiences, I have come to a deeper respect for the work and sacrifices of the generation that left and the generation that stayed, not just in Vietnam, but everywhere. This respect does not mean being naive to the issues of migration. It does mean, for me, an honest evaluation of assumptions and biases about the health professionals with whom I work, here at home and abroad. In the context of the 'brain-drain', I am reminded that we cannot mistake health workers as mere commodities. They are people with rights. They are our colleagues. They are us.

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For #133 and CM

By Samantha Olvera

It was just another day at work in the tiny African country that became my refuge from the stresses of college life, a place where I could bring engineering solutions to living, breathing people. It is the kind of place that most people know from frequently cited statistics. The life expectancy is about 50 years, the infant mortality rate is 79 per 1000 live births, and there are 170 thousand children living with HIV. But to me it is a place where any Malawian would tell you with a smile that they are "fine, and you?" A place where I felt at home despite the *azungu* (white person) prices I paid for fruit at the market and the amused chuckles that my heavily accented Chichewa often prompted.

Looking over my data that morning was far more emotional than any Excel analysis should be. My fellow intern and I had pored over forms for hours, meticulously documenting all the relevant information to the project. As a result, hundreds of young lives had been condensed into rows of boxes on my screen. A relatively short collection of memories and experiences were reduced to ones and zeroes and subtotals and "additional comments." Was the data upsetting because the project's progress was not as I expected? Because the machine that was carefully designed and modified didn't have higher clinical efficacy? No, not really. The data was not just a measurement of the quality of our own work. It was upsetting because for every "1" in Column H a beautiful life had been lost, and there was nothing I could do about it. Each infant we had tracked in the hospital wards, whose mothers we greeted each day, could now only be identified as a patient number.

Walking down the hall at the hospital that afternoon, I recognized the sad and sadly familiar mourning song of grieving families honoring their loved ones and strangers as their bodies were carted through the narrow walkway. I paused and waited against the wall with the rest. I could see their pain, but I did not understand the foreign words they were singing or the emotions they felt then. It's an interesting evolutionary trait and survival mechanism of humans to have the emotional capacity to feel true empathy for only a limited number of people. I just knew that their voices sounded beautiful.

In the nursery, I looked around for a missing medical chart for one of the babies. I asked the nurse, and she looked down at him and then at me. "This baby is not with us," she said, quickly covering him up. This time I felt it. I understood the euphemism, but I'll never understand why #133 had to leave us.

Later that day, I ran down the hall ready to grab the first doctor I saw. A little girl awaiting surgery in the high-dependency ward had suddenly gone into cardiac arrest and stopped breathing. A doctor began resuscitating her by herself, and there was no other doctor around. She looked at me for help, but standing there with my notebook clutched to my chest, there was once again nothing I could do to help except to find someone who could. I had grown to dislike the phrase "I'm an engineer," because it meant there was very little I could do in critical situations on the wards.

I found an orthopedic surgeon in the nursery. Confused by my frantic appeal, he did not hesitate to come and try to help save her. I watched the pair for what felt like an eternity trying to bring her back—a young volunteer doctor who would soon return to her own country and a Malawian physician who had not, like many in his profession, fled the country for higher wages and dreams of a better life. I watched helplessly as "CM, age 11, hydrocephalus" became another set of initials in the tables of the Friday morning report.

"The resuscitation usually doesn't work for older children, but they have to try. It's to show the mothers that they did everything they could to save the child," I was later told by a doctor. "Well I've been resuscitated three times," I thought. And I've watched a baby return from the fringes of their fragile life, growing as plump and happy as any Gerber baby I've seen. So as I stood there paralyzed in a whirl of new emotions, I wasn't grieving. I was just waiting for those brown eyes to open so she could be with us once more.

Just like the children in the spreadsheets were not just a number to me, the resuscitation is not just a "show" for the mothers suffering one of life's greatest tragedies. In reality, it is a crucial tenant of solving any global health problem. It's the idea that one day it just might succeed. And who will ever find out if no one has the courage to try it? If no one is willing to drop everything and give it all they've got to help others? And then keep trying even when it seems like a lost cause. To keep trying despite the devastation and tragedy that continues with each failure. The resuscitation is about facing the most difficult situations with persistence and dedicating oneself to every human life.

When I first arrived I wondered, how can a facility lacking everything from basic office supplies like staplers for medical charts, to enough bed space for newborns, continue to function without crumbling from the inside out? I know now it's because of the people who come back to it every day, holding it up with their bare hands. Knowing it won't be easy but remembering the miracles along with the tragedies, and knowing

that with every individual effort and every tiny success, there is renewed hope in the warm heart of Africa.

Samantha Olvera is an undergraduate student at Rice University majoring in Bioengineering and minoring in Global Health Technologies.

The Best of Intentions

By Barbara Pallav

Everyday, on the brief walk from my trailer home to the hospital, I encountered the bloated bodies of dead toads littering the stone path. Their outstretched tongues stuck to the road like taffy, dried under the scorching South African sun. The HIV clinic was always in various stages of disarray when I arrived, as patients were pricked, prodded, and questioned. "Doctor, we need you to sign these X-ray forms," the requests initially began, though I was not a doctor—only a medical student on a one-year research fellowship. I would pause during enrollment for my study, happy to sign a piece of paper that would otherwise go untouched for another two hours.

Over time, the number of requests grew. As I walked through the female medical ward and the endless rows of metal cots with half-dressed women, the head nurse asked me to see two patients since the ward doctor had left hours earlier. One woman grabbed my arm and pointed at her legs. "I have HIV," she said. "And TB. Look at my legs." I looked. They were swollen, the skin taught under pounds of accumulated fluid. I gently pressed; she winced in response, staring at the resulting indentation. Surprisingly, there was no mention of her legs in the chart. No workup, no evaluation. Her neighbor was a woman aged by her misery. Her skin clung to every rib. I feared she might break if I tried to move her. She writhed in pain, but the cause was unknown. The pharmacy was stocked with painkillers, but few of the patients had been prescribed any by the young doctor who staffed the ward. And so, I evaluated the patients and prescribed them medicines not because I was a doctor, or confident in my medical skills, but because there was simply no one else to do so.

I started helping the lone HIV clinic doctor, seeing patients who would otherwise be turned away. I oriented the endless stream of visiting residents and fellows, often catching their errors — teratogenic ARVs prescribed to pregnant women, incorrectly calculated pediatric dosing, and missed tropical diagnoses. I reassured myself that by that time, I at least had more experience than the emergency medicine resident charged with running the HIV ward without ever seeing an HIV case before, or the heme-onc fellow who had

been delegated the pediatric HIV clinic. I was confident that patients were getting better than medical student-level care, at least compared to the alternative. I maintained this belief until I met Shezi Ndlovu.

On a balmy Spring morning, Shezi bounded into my poorly ventilated examination room for her routine follow-up. She never missed an appointment, scraping together the necessary money to make the two-hour journey to the local district hospital each month. She was 34 years old, widowed, and HIV-positive. She had a cough, despite being on treatment for tuberculosis. I reviewed her chest X-ray, which was suspicious for a new cavitary lesion. Because I was practicing in a region with some of the highest rates of multi-drug (MDR) and extensively-drug resistant (XDR) tuberculosis in the world, I ran her case by a senior clinician and referred her for empiric MDR-TB treatment. I saw her every two weeks for follow-up, horrified at her continued weight loss, anorexia, and weakness at each visit. I stopped her ARVs when she developed jaundice and hospitalized her in the MDR-TB ward. I visited her every day after clinic to spoon-feed her daily meal.

On a quiet Monday morning several weeks later, I arrived on the ward and found only an empty bed. Death arrived quietly in South Africa, claiming bodies daily and leaving behind only crisp sheets stretched across empty cots. Doctors were not called. There were no morbidity and mortality conferences. If you happened to be near the morgue, you would occasionally overhear Zulu funeral chants as relatives carried their dead home for burial. Shezi had died, as I knew she would. But all I could think was that I had killed her. That in my eagerness to avoid another untreated MDR-TB fatality, I had made an empiric diagnosis and started her on multiple toxic medications. To this day, I still don't know what caused her death.

Most of the American students and residents I encountered in South Africa came to do as much as they could. They put in countless hours, sometimes seeing patients long after the local doctors had gone home. They tried to make sense of the poorly charted records of patients they encountered and figure out next-best alternatives when crucial medications ran out. It is impossible to be confronted with such tremendous need and simply turn away. Even now, as a Global Health Fellow with years of experience, I struggle with the moral ambiguity of daily clinical decisions—when to start empiric treatment for disseminated TB in critically ill patients, or the risks of diuresis when we have no way to monitor for electrolyte disturbances. I look back upon my medical student self and realize how ill-equipped I was then to evaluate my own limitations and those of others. The deaths that I witnessed, left alone to see patients and make decisions far beyond my expertise—those are the ones that still weigh on my soul. The ones where I wonder, if those patients had never met me, where they may be now.

We convince ourselves that something is better than nothing, and that good intentions will overcome lack of supplies and mentorship. And yet, for years American programs

have recognized and mandated that trainees require ongoing supervision. As global health programs rapidly expand, I can only wonder when we will start applying the same standard to them.

Barbara Pallav is a Fellow at University of California, San Francisco.

The Local as Global

By Ashish Premkumar

After working in global health and community development for the past seven years and on two continents, I've seen the practice of students going abroad to do clinical and community service work blossom. Reflecting upon my involvement in the care of an HIV-positive pregnant woman in rural South Africa with another medical student, I noticed that he would use "international" to describe our patient's suffering and eventual death from complications of end-stage AIDS. "International," he kept saying, as if to bracket that piece of earth and its inhabitants squarely away from the boundaries of home. It was unnerving to see the line so clearly drawn in the sand – there was us, and then, out there, was "them."

Though many involved in the care of vulnerable and marginalized populations often chalk this problem to a matter of semantics, I consider this example to be a small window into the far too common manner in which we as medical students and physicians perceive our patients in the United States and abroad. The concept of "international" and its dividing connotations quickly lost meaning to me during my medical rotations at Boston Medical Center, where I encountered patients like a dialysis patient who had sought asylum from Sudan and a pregnant woman from the Democratic Republic of the Congo. I found myself face-to-face with major global health issues, including those of human rights abuses, violence, and structural inequality, without even having to leave Boston.

While individuals from other parts of the world may come with unique life and health backgrounds, and while many of us spend our careers working where structural, economic, political, and gender-based challenges are more often discussed than they are in the United States, we must be careful to not use "global health" as a dichotomous term. I acknowledge that as someone who grew up in the United States, it is easy to view global and local issues as separate entities. One could consider the stories of patients I have cared for in the past – a Tibetan monk tortured by members of the Chinese government and a Caucasian woman abusing crack-cocaine in her third trimester of pregnancy. I could draw a geographic line between the issues, saying the former is relegated to the

"outside world," and the latter is squarely in my community. However, I urge those who are both working and retain an interest in global health to view the local as global and vice versa. At Boston Medical Center, I have seen a number of patients who have spent most of their lives in the neighborhoods of Dorchester and Roxbury. These areas are known throughout the city for their dense minority populations, violence, patterns of substance abuse, and social malaise, compounded by years of structural inequality, poor civic planning, and socioeconomic apartheid. Though manifestation of such issues is complex, injustice and inequality promote pathology regardless of geographic location.

The global and the local, despite considerable differences, feature similarities that can teach us a lot about issues going on both in our backyard and ten thousand miles away. Even though the need for good health is universal, the "global" in the term "global health" is often overemphasized, masking the overlap of global and local. This emphasis on "global," rather than on "health," is what creates the unduly sense of otherness and inferiority when we speak of different parts of the world. Human rights abuses, genocide, and violence are not just facets of life outside of my local community in Boston, but find themselves reproduced through our history and institutions. Moreover, the way individuals exposed to these horrific acts interact with systems of care unmasks, oftentimes strikingly, the inequity of life in the United States. Allowing such self-reflection in the discussion of health both at home and abroad not only dissolves the perceived gap between us and them, the global and the local, but also, and perhaps more importantly, prepares us to pursue scientific and social inquiries that will provide better care and support to our patients and communities.

Ashish Premkumar is a student at Boston University School of Medicine.

Made from Corn

By Abi Struck Marcell

"After that they began to talk about the creation and the making of our first mother and father; of yellow corn and of white corn they made their flesh; of corn meal dough they made the arms and the legs of man. Only dough of corn meal went into the flesh of our first fathers" - Pop Wuj

This story describing the beginning of humanity comes from *Pop Wuj*, the sacred Mayan book that contains mythological and historical stories originally passed down through oral tradition. In the creation story, humans are only successfully created from corn, or maize, after three failed attempts to create humans from animals, earth, and wood. In the end, humans could only be molded from corn.

An anthropological observation contends that civilizations and cultures revolve around a grain, and that corn is the grain of Mayan culture. Though not all Guatemalans may be familiar with the creation story, corn continues to play an important role in the lives of Guatemalans today. Corn finds its way in artwork, is carved on gravestones in cemeteries, is eaten in different forms at most meals, and is cultivated on vast expanses of land. Guatemalans imbibe the notion that they are literally made of corn. It was through the lens of corn that I viewed the health of the patients and communities I saw as a medical student first on rotations throughout Iowa and then on a two-month clinical rotation in Guatemala.

Gentle, Rolling Hills of Iowa

Before leaving for Guatemala, I spent a month working with a family doctor in a small Iowan town, where I saw the connection between the land, food production, eating habits, and associated health. It seemed ironic to me that in a land of such rich soil, people were consuming predominantly processed foods, white bread, meats, and soda. Most of the corn produced was being converted into high fructose corn syrup, used in processed foods, animal feed for meat production, or ethanol to run cars. In general, patients in the clinic were not eating enough vegetables, whole grains, or fruits. The most common

issues I saw were related to lifestyle. A serious progression of health problems usually began with obesity, leading to diabetes, hypertension, non-specific musculoskeletal pain from increased body inflammation, and back or knee pain from the stress of created by excess weight.

The drought that affected much of the United States turned Iowa's once-green fields yellow and brown, and became one of the most heated topics of conversation. The decrease in production compounded the stress of living in a rural community and heightened already high levels of anxiety. Whether directly working on a farm or not, everyone seemed connected by the cornfields. The life and vitality of the fields was closely tied to the entire community's well-being.

Corn Cultivation

The most common type of corn grown in the United States is dent corn, which is used for animal feed or ethanol production. Flint corn, grown for human consumption, is the most common type grown in Central America. Not only are the types of corn and the way they are eaten different in Iowa and Guatemala, the way corn is produced bears a split identity, resulting in various health consequences.

Corn plants deplete soil of nitrogen, making it necessary to plant corn alongside another plant capable of returning nitrogen back to the soil. In the United States, this is achieved through planting corn in a field one year and soybeans in the same field the next year. Large fields are planted and harvested with machines, and a farmer's work generally involves a lot of mechanics. During my time in rural Iowa, I saw several patients with machine-related injuries, from deep hand cuts to small pieces of metal lodged in their eyes.

In Guatemala, corn is planted with black beans or fava beans, both plants that climb up the stalk of corn, making it possible to plant them together during the same year, each year. All the cornfields are planted, cared for, and harvested by hand. Unsurprisingly, generalized pain, and osteoarthritic pain, is very common, even in young harvesters. Unlike in the United States where this pain can often be attributed to obesity and decreased physical exercise, in Guatemala most of my patients experienced generalized, musculoskeletal pain from wear and tear use incurred during physical labor, whether they were farmers or women caring for their children and homes.

Life in Guatemala

As previously mentioned, corn is the staple food in Guatemala, and is usually present at every meal. It is eaten in various forms, such as corn on the cob, corn dough made into tamales, ground corn made into tortillas, and corn mosh. Eggs are also widely consumed. Meats are more expensive, but usually eaten once a day in middle-class

families. Vegetables are also more expensive than the other offerings. People would dilute the rich coffee taste with mountains of sugar, perhaps to ease the pain of wear and tear from physical labor.

In the clinic, I was able to connect these eating habits with visible health concerns. The majority of problems were related to lifestyle: diabetes and subsequent neuropathy, hypertension, generalized musculoskeletal pain, gastritis, and malnutrition or undernutrition. These problems are all commonly seen in the United States and related to lifestyle, though the lifestyles are very different. In Guatemala, excessive amounts of refined sugar and carbohydrates in corn, with little protein, create a platform for diabetes, and related hypertension. Gastritis or gastro-esophageal reflux symptoms appeared to be most common after patients had eaten black beans; making picante a likely culprit. Under-nourishment and vitamin deficiencies resulted from lack of adequate protein, vegetable, and fruit consumption.

Many Guatemalans living in poverty subsist on a diet containing only corn and black beans. About 50% of children in Guatemala suffer from chronic malnutrition that begins *in utero* with undernourished pregnant mothers. Chronic malnutrition leads to poor development and growth, including cognitive and mental slowing, and decreased immunity. The most common cause of death in Guatemalan children is from respiratory infections and diarrhea due to gastric infections. Another 15-20% of children suffer from acute malnutrition. Sadly, Guatemala is the only Latin American country that has failed to decrease its malnutrition rates in the last decade.

I remember a six year-old boy who came in with his mother complaining of bilateral knee and leg pain. When I plotted his height and weight on his growth chart he was under the norm for his age, a regular occurrence I came across nearly every day in the clinic. Stunting is extremely prevalent in Guatemala, and often goes unnoticed when everyone in the community is suffering from malnourishment. I looked in his mouth and found multiple dental caries. Almost all of the children I saw had dental caries, most likely related to high sugar intake and lack of fluoride in the water.

An 11 year-boy complaining of dry skin and lips asked for sunscreen and chap-stick. I asked him how many glasses of water he drank a day, and he replied that he had about half a glass a day. A 33 year-old woman came in with headaches and told me she had about one glass a day. Since the water system is often contaminated with bacteria and parasites, people have learned to drink as little as possible to avoid acute infections, but as a result have ended up with other problems related to dehydration.

Fiesta de Maize

There is a farming community in Guatemala that benefits from many projects by the non-profit organization I was working with. As a way of saying thank you, every year around harvest time they invite everyone from the organization to come to their community for a corn feast, a Fiesta de Maize. They prepare a huge amount of corn on the cob with ketchup, picante, mayonnaise, lime, and salt to put on the corn. I was fortunate to be there during this event, when a leader of the community gave a speech.

He explained that the community was very grateful, and that the feast was a sharing of their harvest crop, the same way the organization shared their harvest with the community. He told us that within the organization different types of people are able to join and work together to accomplish so many things. Even though we had many different religions, beliefs, and lifestyles, these differences did not exist with the sharing of the harvest. We all sat around the large table, contemplating these words, crunching the multi-colored corn in our mouth. The yellow corn and the white corn making up our bodies, our flesh; eating till we felt the bulge and swell of our stomachs telling us we could eat no more.

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Moving Between Two Worlds: Global Health Volunteering and the Return Home

By Kathleen Miller

Here, in the largest public hospital in an impoverished country in Central America, my medical training has been rendered almost useless by the differences in the approach to patient care. There is no child life specialist when we put in IVs, with an iPad filled with distracting games. There is no Versed for sutures – only strong and skilled nurses who can hold a screaming child. Instead of giving Tylenol for fevers, we first strip off the clothes of the children and give them a cold bath in an attempt to save medication for those who need it most. There are no chest X-rays for pneumonia, only clinical suspicion and acute physical exam skills.

There are still respiratory infections, coughs and colds (especially now, in the rainy season). But there is also dengue, malaria, and leptospirosis. Diarrhea is not the benign annovance that it is in the United States, but a potentially deadly disease.

As I sit here writing this, I am in the hospital's pediatric emergency room. It is a large room, with desks and chairs packed as tightly as possible on one side, the single exam table in the corner, and a plethora of mismatching cribs and beds crammed onto the far side of the room for the patients who are waiting to be admitted. We use the same broken thermometer for all patients, and hope that maybe it will be correct. The hallway is filled with patients lining the walls. Some are standing, some sitting in the limited number of chairs, and a handful (the very sick) lying on cots. Armed guards with rifles wander the halls. A mural depicts a man with a gun standing on top of a pile of bodies, opponents defeated during the recent civil war.

To me, the mural is a constant reminder: life is fragile here. It is considered less of a God-given right, and rather a privilege denied to many.

I am a seasoned traveler. My first experiences in medicine were not in the pristine halls of my medical school, but in the surgical ward of a public hospital in Honduras. I went on to work in Peru, Argentina, Mexico, Guatemala, Haiti, Brazil, even as far as Tanzania. I am no stranger to culture shock, or the disarming sensation that I am moving through different worlds.

My world in the rural state of Iowa is where my life is. How can it be that that world – the one where I drink lattes and spend thirty dollars on a haircut without batting an eye – can exist parallel to the place I find myself now? If I separate them, and treat them as two entirely unique and unrelated entities, my life is more peaceful. I can sleep soundly, knowing that my latte will be waiting for me when I go home.

But they are *not* separate worlds. They are the same. And yet somehow, we live in a world in which I, by an accident of geography, can drink lattes while children here waste away from malnutrition.

How can I justify my "medical tourism"? I want to learn, about medicine and about the world. The Spanish I learn in many of these countries will help me better serve patients when I return home. My intentions are noble, at least.

But where does my responsibility to the patients I see here begin and end? To that end, how can I even begin to defend my comfortable lifestyle at home?

The differences here are stark. But the hardest part of trying to move between two worlds isn't managing the difficulties of being here. It's trying to return to the world I grew up in. It seems impossible, when this experience is so fresh in my mind. I've done it before, so many times – and yet each time, I wonder if this is the time that I might not be able to do it.

What's the compromise, then? How can I live a reasonably "normal" life (relative to my upbringing in the United States) when I am uncomfortably aware of how the majority of the world lives?

I don't have any easy answers. I can only share what I have discovered from my other travels, which even I don't find especially comforting right now.

The things I learn here will serve me. They will make me a more empathetic physician. They will influence how I choose to spend my money in the United States – perhaps I will buy from a sustainable source, or spend less on myself and give more to charity. They will change the way I bring up my children (for the better, I hope). I will see patients who come from other countries, and I will be able to better relate to them.

Perhaps most importantly, I will live my life with gratitude. I will avoid the sense of entitlement that I find so off-putting in many of my peers. I will happily pay my taxes, knowing that I am paying for our collective ability to live comfortably and take care of one another. I will even be grateful for my student loans, which have given me the opportunity to learn and to serve. I will know how incredibly fortunate I am to have been given so much. I will think about the children in the emergency room here, and remember how incredibly fragile life is — and remind myself that to live is a privilege, not a right.

Kathleen Miller is a Pediatrics resident at the University of Wisconsin, and a graduate of the Carver College of Medicine at the University of Iowa.

Enhancing Breast Cancer Awareness While Being Culturally Sensitive

By Jagdish Ramlingh

Breast cancer is one of the most common cancers affecting women globally. Though significant advances have been made in the screening, diagnosis, and treatment of breast cancer, considerable social and cultural barriers limit the level of awareness for screening in many Asian countries such as India.

There are numerous articles and research papers which indicate that, due to the social stigma attached to open discussion about breast health, women in India are often too shy or embarrassed to share discoveries of breast abnormalities such as a lump. They hope the lump subsides on its own or try home-based remedies instead of visiting a physician. This has resulted in 30-40% of cases being detected in late stages beyond any possible curative treatment.

One measure to minimize late-stage detection is conducting adequate awareness campaigns. Unlike the United States, there are hardly any mass awareness programs or advertisement campaigns promoting periodic mammograms in India. Efforts to create more awareness platforms have been hampered by pragmatic fears of objections from government bodies and of offending cultural sensitivities. For instance, in October 2012, a regional municipal corporation in Mumbai, India's largest city, objected to postings intended to draw attention to breast cancer awareness. The corporation deemed the images in the postings to be socially unacceptable because of the objectionable depiction of bras.

Alternative measures for creating mass awareness must be taken. While I was working on a breast cancer project in Tamil Nadu, a state in South India, physicians expressed that upon discovering abnormalities in their breast or reproductive system, women in India usually approach their family obstetrician/gynecologist (Obs/Gyn) rather than a cancer specialist. Women typically visit the Obs/Gyn who has previously treated them during childbirth or other contexts, and who they already trust. However, most of the Obs/Gyn in India are not trained to adequately detect breast anomalies and

do not generate enough awareness for breast cancer. The problem is further worsened by the substantial demand for Obs/Gyn. With a high population in the country and a significant number of patients visiting a child-birthing center, the majority of Obs/Gyn are overburdened and work exhausting hours. This does not allow them to dedicate time to spreading breast cancer awareness among the large number of women visiting them.

However, the necessity for effective methods for raising awareness remains. One potential solution lies with the nurses and female staff working with the Obs/Gyn. They are in constant communication with many women visiting the clinics and hospitals. The continuous interaction has allowed the nurses and female staff to build trusting relationships with a large number of female patients. This strong, existing relationship can be leveraged as a platform to spread knowledge to the patient, her friends, and relatives. Utilization of word-of-mouth, posters, and pamphlets in the Obs/Gyn clinics and hospitals, combined with the assistance of proactive nurses and female staff, can help create substantial mass awareness.

Another issue that needs to be resolved is the low adoption rate of mammography equipment in diagnostic centers. In India, many doctors including Obs/Gyn practice in private clinics. They generally do not have diagnostic X-ray systems and usually refer their patients to private diagnostic imaging centers. Interviews conducted at private clinics and diagnostic centers in urban and semi-urban regions in Tamil Nadu revealed a vicious cycle that has barred the adoption and penetration of mammography equipment. On one hand, a common reason cited by diagnostic centers for not having mammography equipment is that they do not receive adequate prescriptions for mammograms from doctors. On the other hand, many doctors indicate that one of the reasons for not prescribing a mammogram is due to many diagnostic centers lacking appropriate mammography equipment. They claim that even if they prescribe a mammogram, many patients would not have the mammogram done.

Formation of public-private collaborations between major manufacturers of medical imaging systems (e.g. GE Healthcare, Siemens Healthcare) and national governments may help address this issue. These companies, in addition to installing mammography equipment, need to take a more active role in helping diagnostic centers publicize the availability of mammography equipment to the nearby referring clinics. This can increase the sales for the manufacturing companies as well as benefit the diagnostic centers by increasing the volume of mammograms, creating economies of scale, and reducing the cost for patients. A 'hub and spoke' model can be a good option in this case where the diagnostic centers form the hub and small clinics form the spoke. The clinics can direct their patients to the diagnostics hub.

Though there have been several successful mass campaigns to eradicate diseases such as polio and small pox in India, the fight against breast cancer has been timid and weak.

India's National Health Profile 2011 indicates that breast cancer will overtake cervical cancer as the most common type of cancer in India by 2020. With the rising incidence of breast cancer in India and problem of late-stage detection, there is a significant need to adopt innovative ways to increase the awareness of breast cancer in a culturally sensitive way. Spreading awareness through nurses and women staff working with Obs/Gyn, as well as the formation of private-public partnerships to increase access to mammograms, could be effective in preventing this disease.

Jagdish Ramlingh is pursuing a Master's in Business, Entrepreneurship and Technology from the University of Waterloo.

Empowerment in Global Health

By Jessica Ray

A thirty-something-year-old man sat in front of me, hunched over, head hung low. His face was worn and tough from years in the sun, his hands leathery and dirt stained. He wore a thick, colorful sweater made of alpaca wool, torn pants, and over-sized work boots. But under all those clothes and behind the leathery skin, he seemed frail, fragile.

I introduced myself, shook his hand, which was quite clammy, and began asking him (in Spanish) about what brought him to our clinic today. Almost immediately, his story was not the same as the ones I had been hearing all morning - back pain, heart burn, headaches. Instead, he slowly began to give me a detailed story about a cough that wouldn't go away for the past couple of months. He described it as a deep cough that came from inside of him. The cough hurt his entire body. He went on to say that he regularly produced sputum. Recently he had seen blood in his hand when he coughed the other day. He was frightened by the blood. As I asked him more questions, I learned that he was no longer hungry and was having some difficulty carrying the 75+ kilogram blocks at his job on the construction site. Additionally he had night sweats and his clothes were now too big for him. He had recently started a job in the more urban town, but still traveled home to stay with his family on the weekends. The more I listened to his story, the more concerned I became.

On closer physical examination, his face seemed to be sunken and pale. When I listened to his lungs, I immediately noticed decreased breath sounds. When I had completed the interview and the exam I politely excused myself from the encounter, leaving the man to sit alone on a desk chair in the corner of an open one-roomed school house with dirt floors and glass-less windows that the group had temporarily turned into a make-shift clinic for the day. I walked across the room to consult with the attending physician. I methodically presented the history and physical as I was taught in school, and watched as a look of concern gradually crossed over his face. We both knew exactly what was going on – it was a classic presentation of TB and we were in an endemic area. However, we were at a loss of what to do. In this remote mountain town of the Sacred

Valley of Peru there were countless obstacles to his care: the nearest local physician with resources to treat TB was over 150 km away, transportation was infrequent and unreliable at best, and a man's labor is essential to his family's well-being. Not to mention, since we were a transient, foreign, medical mission providing temporary medical care he was not linked into the local system and was inevitably going to be lost to follow-up. It seemed nearly impossible to provide adequate care for the patient. As such, I was left with one option. I slowly walked back over to the patient. I carefully explained his potential diagnosis in the simplest terms possible and tried to convey what it meant for him and his family. But while I could calmly tell him about the likely disease, I could not provide him with any means of care. There was a look of confusion and hopelessness on his face. I felt helpless.

When I reflect back on my three weeks spent on a medical mission in the Sacred Valley of Peru as a first year medical student, this patient and his story is what I remember most vividly. Sure I remember the children who loved to play with bubbles and the songs they recited about brushing their teeth and the looks of amazement on the old men's faces when they put on a new pair of glasses. But what really sticks out is the feeling of helplessness I experienced as I shook the hand of the man who I knew was going to die of TB without any medications or follow-up care.

In the world of short-term global health initiatives and projects, everyone wants to do the right thing. The problem is, it's often difficult to determine what exactly is the right thing. What I have taken away from my experience is that we must be careful about what we choose to do and how we choose to do it. We cannot practice outside of our means, we cannot diagnose patients if there is no appropriate treatment available or no appropriate coordination with local health care professionals, and we cannot support unsustainable efforts that temporarily fix the problem on the surface without addressing the root of the issue. These practices ultimately do not help the local people, but instead lead to perpetuation of underlying problems, encourage dependence on outside forces, and eliminate empowerment.

I now better understand the importance of considering both the significance and impact of our actions in the context of the local people and their needs when planning and executing short-term global health initiatives. We must always keep in mind the needs and wishes of the locals, which are not always the needs that we foreigners identify or harp on. Additionally, it is imperative to focus on the best ways to improve the lives of those we are interacting with long-term, not in the moment. For this reason, education initiatives that incorporate locally identified needs and knowledge have the most promise and ultimately the most impact.

Upon returning from Peru this past summer, I have worked to restructure our medical student run global health initiative. We will no longer be conducting one-day clinics in remote towns, practicing outside our means and outside the local medical system. Instead we will be hosting symposia for local physicians in more urban settings, leading workshops for the lay health care workers in the more remote towns, and organizing educational efforts for community members and students, all with focuses on locally identified concerns and needs such as STI education and oral rehydration. We hope that these efforts will empower the people of the Sacred Valley – physicians, lay health care workers, and community members alike – to take control of their own health care and gradually improve their quality of life without creating dependence on outside resources which are typically short-lived and frankly not guaranteed to continue year to year. Ultimately, while we may not be providing short term relief, we will hopefully be providing sustainable means for long term progress.

Jessica Ray is a third year medical student at the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University.

Falling

By Nora Rosenberg

At 8:45am, I received a call from my colleague Daniel asking if we could move our 11am meeting up to 9am. When he called, I was lying on my back with the curtains drawn and my eyes closed. Earlier that morning, I had woken up with diarrhea; more accurately, I had woken up with diarrhea *again*, the fourth day in a row. Lying down was helping my stomach settle, and by the time Daniel called, I was feeling somewhat better. I agreed to be at his office in 15 minutes.

Daniel worked at Lighthouse, a state-of-the-art HIV clinic in Malawi. I lived in a guesthouse on the same campus, a 3-minute walk away. As I left my guesthouse, the sun was already high in the sky. I squinted to adjust to the brightness and became sweaty on the brief walk over. I feigned normalcy as Daniel described the home-based care program, which sends nurses to communities to care for chronically ill patients and organizes volunteers to support HIV-positive people on therapy. I tried to engage—taking notes and asking questions—but my GI tract was off. I decided to excuse myself and reschedule.

Daniel looked puzzled. We discussed possible future meeting times, but I was unable to focus. I got up with a small head rush and began to walk home. As I turned the corner to the outdoor corridor, I felt the sun burning a hole through my forehead and began feeling dizzy. I crouched to let it pass, to no avail. A nurse walking by helped me find a seat. I realized I would feel even better if I lay down.

I was in the middle of a dream when I felt a firm finger on my wrist. Chris, a physician from the United Kingdom, was taking my pulse while a nurse was steadying my shoulders. I closed my eyes and lay back down. When I reopened my eyes, Chris told me I had fainted twice. I explained that on the previous Saturday, I had thought my bout of diarrhea was over and consequently went dancing. On Sunday, I had played Ultimate Frisbee in the hot sun for two hours and had forgotten to bring water. I emphasized that I was fine and just needed to hydrate.

I wanted to go home, but Chris forbade this and told me I needed to be admitted. He asked if I preferred Lighthouse or UNC Project, my own workplace one parking lot away. I was torn between the guilt of taking up a bed of a truly sick HIV patient if I chose Lighthouse and the embarrassment of having to explain this to my coworkers if I chose UNC. Before I could decide, Chris chose UNC for me. When I arrived at UNC, concerned colleagues came over to find out what was wrong. One colleague escorted me into the bathroom and was instructed to wait for me. When an exam room finally opened up, the Director walked by and asked what I was doing on an exam table. My clinician turned out to be my student and I had to describe in full detail the color, consistency, and frequency of my bowel movements and was asked to provide a stool sample.

I took Metronidazole, a medicine effective against several bacterial and amoebic infections. I drank fluids and rested. And though I never learned what I had, I recovered in a few days and knew it was a minor blip in my life, one that got blown out of proportion by the poor decision to leave the guesthouse.

I wanted to leave the incident behind me, but in the days that followed, colleagues at both organizations gave me penetrating looks of concern. Our housekeeper encouraged me to rest whenever she saw me standing up. Our administrative assistant was perplexed when I told her all I had was GI trouble. And when I finally did go out with Daniel's community workers, they were surprised to see me alive. They repeatedly asked if I had recovered from "when you fell."

I only began to make sense of the intense concern in the weeks following. I learned that in the same week of my incident, a colleague in her mid-thirties had lost her younger brother. She described him going to the doctor with a headache, not finding anything wrong, and never waking up. The following week, at the second day of an HIV/AIDS meeting, we stood for a moment of silence for a colleague who attended the first day of the meeting, and who had passed away before the second. And when I went to the community with the home-based care team, one of the young patients, who had been seen on Thursday and started a new treatment regimen on Friday, had died on Saturday. I shared this with a colleague who shared a story of an adolescent family member who was perinatally infected with HIV, but did not know it. Her family was going to tell her after her exams, but she tragically died before they had the opportunity. In the United States, such stories are rare occurrences. In Malawi, they are far too common.

Life proliferates profusely in Malawi. The countryside goes from "dust to lush" after a few big rains. Women are breastfeeding one baby when they become pregnant with their next. Lettuce grows from seed to leaf in days, producing salads for weeks to come. Beans develop pink slime after a day on the hot counter. And organisms reproduce in my digestive track until Metronidazole takes hold. But on the other side

of this vigorous proliferation of life, death lurks quite closely. All Malawians have witnessed seemingly healthy loved ones fall and not awaken. During my brief sickness, I never felt scared that I would not recover. But from the looks on others' faces, I felt that shadow a bit too near.

Nora Rosenberg is a Fellow at University of North Carolina.

Reflections of an Initially Ambivalent Volunteer

By Jennifer Rosenbaum

"What did you do this summer?" Oh no, here it comes. "I went to Haiti." "Oh, cool. What were you doing there?" "Volunteering ..."

A now-familiar barrage of questions inevitably follows. "Oh that must have been such a great experience! Was it so sad? Was it amazing?" Over time, I began to shy away from talking about my summer experiences just to avoid explaining how bizarrely ambivalent I was about what sounded like a selfless mission of mercy. The truth, of course, is more complicated.

I spent the better part of my first year of medical school trying to get to Haiti for the summer. I tried public health projects, clinical sites, and research studies in search of any place that a first-year with no Creole but decent French could be of use. I wanted to avoid just claiming to contribute while experiencing an exotic locale. I would never assume I'd be able to give back as much as I was getting; that equation never seems to balance out in international work. But I was hoping to be more than just a tourist.

After nine months of frustrated attempts and false starts, I found a small organization that was thrilled to have me, albeit less for my larval medical expertise than for my background in early childhood education, teaching abroad, and briefly running a site at summer camp. I had my doubts about the program as one of its goals was "to teach Haitian mothers how to parent their children better," which sounds thoroughly politically incorrect, but they were offering me the chance to go to Haiti with the very real responsibility of overseeing a project for a few weeks. It was sudden fortune thrown my way and I took it without asking too many questions.

Admittedly, I had never been so inadequately prepared for an international trip in my life. Five weeks seemed like nothing compared to the year I'd spent living in Africa, so I skipped out on the heavy pre-research and managed to forget many "essentials," like a flashlight and bug repellent. I skimmed a textbook on Haitian Creole, telling myself I'd study it in Haiti, where I would have a full immersion language experience. I envisioned myself returning to the U.S. fluent in the new language and able to expertly care for

the Haitian patients I was certain to encounter in my third and fourth years of medical school. However, I was deeply mistaken.

This was a project on a smaller scale with six kids rescued from abusive orphanages and placed into a beautiful house with their mothers. (Orphanages in many parts of the world don't necessarily mean a lack of parents, but rather that the parents cannot afford caring for their child. This is the case in Haiti.) I had worked with tough kids before, but never kids as tough as these. The scars of years of deprivation were evident in their constant attention-seeking behavior, undersized bodies, and learning delays. I wished many times for more knowledge – better Creole to communicate with them, training to cope with the learning delays, and an understanding of developmental psychology in order to discern where the delays ended and the learning disabilities began. Because I was a medical student, I was immediately thrown into the role of health caretaker. I monitored daily medications, tended "boo-boos" small and large, and accompanied one child with chronic kidney stones to the local clinic. I often felt overwhelmed as a result.

Slowly, I learned. I learned how much to discipline, how much to forgive. I learned enough Creole to make myself understood – if nowhere near enough to fluently understand or speak it. I began to understand the goal of "teaching Haitian mothers to parent their children." Never have I met children so desperate for a hug, a kiss, or any kind of attention. They screamed as if dying at every tumble and fought with one another if they caught you looking the other way – and small wonder when these overreactions appeared to be the only time their mothers paid attention to them during play.

Through it all, I was exhausted as deeply as I have ever been. There was rarely enough food for anyone to eat his or her fill – never as much protein as I was used to. In the end, I learned more about pushing myself to take on new responsibilities than I did about Haiti and Haitian culture. I rarely went more than walking distance from our house, and if I did it was not to immerse myself in the heart of the Haitian countryside, but to relax and buy a hot meal in an upscale suburb of Port-au-Prince. But in my role as guru of all problems health-related, I learned to say "kidney stones" in French. I fought my fear of transgressing an unwritten cultural rule to talk with strangers in new situations, and found I only learned more as a result. I cold-called several medical labs to find out if they did X-rays and how much they'd charge, all in my strange hybrid Creole/ French. I did not know I was brave enough to do these things.

So, naturally, I'm afraid I got more out of the experience than the children and their mothers got from me. I hope the money I raised for them will be helpful, and I know they'll love the photos I send back. And I'll keep telling myself I'll learn Creole, keep thinking of them for years. Will I be a better doctor because I spent this time abroad? I may never know the answer. Ostensibly I went to Haiti to help, if not these kids,

then my future Haitian patients. Fundamentally, I went because I was fascinated with stories of Haiti as an extension of Africa in my own backyard. Ultimately I brought back only the understanding that I knew less than I thought, but that I can do more than I know.

Jennifer Rosenbaum is a medical student at Boston University School of Medicine.

Daily Tragedy

By Faysal Saab

During my 4th year global health rotation in Malawi, my team was asked to see a 30 year-old woman, Mrs. M, who presented with shortness of breath, cough, and severe weight loss. Despite her young age she had the appearance of a 60 year old, weak and extremely malnourished. Her exam was pertinent for subcostal retractions, jugular venous distension, and hepatomegaly, while saturating only 66% on room air. Her chest x-ray showed large bilateral pleural effusions and cavitary lesions. It was unbelievable to me that she had been living like this. She needed to be admitted, and it cost 200 Kwacha (around 80 cents) to complete the registration for her admission. She said she only had 50 Kwacha, or 20 cents. We weren't going to deny this woman admission, so we went to the cashier with the paperwork and paid her admission fee. We had to do this discretely or else everyone in the hospital would expect this from us – such a difficult situation. I remember thinking that this miniscule amount of money could demonstrate to Americans how much a \$1 donation could actually do.

Mrs. M's "guardian," the one who takes care of her and helps with medical decisions, was her 12 year-old daughter. She was barefoot, alone, and she ended up staying with her mother for more than 1 month in the hospital with nothing to do, nobody to talk to, often spending the night on the front lawn of the hospital. On the day Mrs. M was admitted, I walked her daughter to the tuberculosis registration office where I remember staring at her while the officer asked her questions about her mother's health. I wondered if she had any idea about what was really going on. I observed her carotid pulses while sitting next to her to see if her heart was racing, but it was in the 60's, normal, and she looked calm – ignorance is bliss I guessed.

I sadly realized that she would likely get HIV as she became sexually active in the next 5 years, and that she likely had already contracted tuberculosis from being around her mother. It seemed that she would be resigned to the same fate within 10 years if she did not seek medical care. All the while she was getting directions from the tuberculosis officer as to how and when to give the medications to her mother. I just stared at the

girl the whole time, baffled at this sight. I then wished that everyone who believed in an omniscient, omnipotent, omnipresent God could sit in that room with me and stare that girl in the eye and tell me that her and her mother's situation are all part of a grand plan. That did not mesh well in my brain. At that moment, I felt that these were the events of a sad, random life that we live, all up to luck – what family we're born to, what country we happen to be in, what opportunities we have. This girl was not created equally. This girl did not choose this fate and at that moment I felt that no loving and gracious God would allow such suffering.

When we were finished, I walked her down a long, empty hall to the inpatient unit to her mother's room. It was the same exact walk I had with the mother of a previous patient who had just died the night before, also from an HIV-related infection. I got teary eyed then because it was a complete deja-vu; maybe this girl's mother would not survive the night either. I thought, "What will this girl do? How will she even get back home? What other family does she have? They lived so far away." As my team headed back home, I could only hope the next day would not bring another tragedy. But in Malawi, I learned that every day is a tragedy.

Faysal Saab is a 3rd year Med-Peds resident at UCLA and is a part of the Global Health Track. He aspires to work as a dual hospitalist while continuing to practice in underserved regions of the world, in hopes of connecting medical students and residents to powerful global health experiences.

The Cholera Ward

By Katrin Sadigh

I never learned his name, though the lines of his face linger from the summer I spent in Uganda between first and second year of medical school. I was taking part in a clinical rotation at a community hospital in the north of the country near Gulu, a region of the world still resounding with undertones of tragedies like Ebola outbreaks and the kidnapping of children to fight alongside counter government resistance militias. One day after completing rounds, the local physician responsible for our clinical education motioned for my classmate and me to accompany him to see one other patient. We waded through scores of patients' families seeking shade and nesting under the accommodating low riding limbs of large blossoming trees. After a short walk, we came upon a white washed structure that stood on a small hill, set apart from the medical campus, which at one time housed cholera victims. A nurse, brusque and angry, threw a box of facemasks at us before heading outside. The doctor explained that this was a patient with tuberculosis that "no man can treat." He elaborated, explaining how the patient had been receiving treatment near his village but only intermittently due to a constant shortage of medical supplies that plagued the entire country. He had arrived to this hospital after days of travel from his village with no more than the clothes strewn on his back and a searing cough, looking for a way out. Only no one wanted to go near him due to fear of his resistant disease and the heavy blame placed on him alone. As though he had singlehandedly willed into being the array of mutations that so nimbly out-maneuvered modern medicine, both the clever and the strong-fisted.

I placed a fresh green mask over my face, quietly relieved by the seal that temporarily separated the air I breathed. When I entered the room, it was into a cave with multiple empty beds lined up in rows along the perimeter, windows unseen but suggested by limp falls of light on peeling walls. The patient seemed small sitting at the far end of the room, desperation in his wide eyes visible above the sullied, precariously placed mask. They were eyes none of us could meet—even the doctor, as he began to ask his questions in one run-on sentence. Instead my eyes fixed on the wide-open holes carved crudely

in the middle of the cholera beds, and then furtively fell on the patient's caved-in chest quivering with each laborious breath like a pigeon's feathers arrested in mid-flight. The doctor stood at the maximum distance the stethoscope could afford, listening to breath sounds. He motioned for us to follow suit, but even if shame had not choked my efforts, the patient's breathing spurned clinical scrutiny, only poetic in its deliverance.

But this was no defeated man. In spite of being banished to the cholera ward, long since obsolete, housing a scary variant of tuberculosis deep in his lungs, shunned by family and community, he was not ready to give in. His fervor stood in sharp contrast to the resignation to which I had grown accustomed in the hollow eyes of the sick in a country with scarce accompanying resources. His words had mass, even when drowned in fits of coughs, and fell heavily upon us as he questioned our wordless gestures and exposed the coldness of our language. His questions were reasonable, expressing a need to understand what had brought him to that place, and why there was nowhere else to go. "How can there be nothing?" But we had not been prepared for these questions, and so we gave no answers. Our presence in that room was merely a formality, our brief physical examination—our fingers drumming his chest, our hands turning over his hands—an ill-disguised act of cowardice, even artifice. We left him seated on the hard hospital bed, shedding our hopelessness onto him as we turned to go.

The next day, when overhearing a conversation between two physicians, we learned fortuitously of a clinic, deep in the north, *devoted to the* care of patients with extremely drug-resistant tuberculosis (XDR-TB). While the logistics of transporting the patient to this clinic were not insignificant, I asked how it was possible that in this most far flung of places exists a clinic willing to take on the complex medical care of someone whose own community had pushed to the margins. It comforted me to imagine this man traveling to this place, possibly healing. But it was a momentary comfort. When I am being honest, I recognize that injustice is not just about what is unequal and unshared but also about mute complacency, the inability to demand more of oneself. So I am working harder now, so that the next time I see the frail and cruel, I will not stand mute.

Katrin Sara Sadigh is a resident of the Yale Internal Medicine Primary Care Program HIV track.

Aims, Concerns and Hopes

By Marwa Saleh

I study in Qatar, a country where the indigenous population constitutes less than 15% of the 1.8 million people residing here. By the latest statistics I was following, over 50% of people in Qatar were migrant workers, most of whom arrive to join the unskilled labor force. Then, I became interested in global health.

I was travelling to Africa and southeast Asia, where many of the migrants were from, to practice global health. Only when I redefined my definition did I realize global health was right at my doorstep. This is a my reflection on the process of translating global health principles into practice: our aims, struggles, concerns, and future hopes.

I co-founded the Global Health Club (GHC) at my university, probably the first of its kind in a Middle Eastern medical school. It all started over a lunchtime conversation. It took the words of a Lebanese (myself), a Tanzanian, and a Pakistani, all medical students in Qatar, to articulate our vision. We described our organization as "a club that believes in the phenomenon that responsibility of health goes beyond the boundaries of a nation." Our goals were divided into three levels that focused on the individual, university, and community. We recruited over 25 students in our first year in 2010, which was a good number considering our student population was less than 300.

Little did we know at the time we applied, our campus was the product of a global health American-Qatari partnership. Our medical school class of 50 has students from over 10 different countries. Our teaching hospital treats patients even more diverse than our student body. Hence, our definition of global health in Qatar has always been simple: global health is *everyday* health. Despite this simplicity in defining global health, as students, we faced much difficulty in formalizing it.

Our main focus as a group has been on individual-level involvement. For starters, most of our student body lacked the basic knowledge of global health. In a short video examining student views on the topic, none of the interviewees were able to identify the

'key' global health diseases (despite confronting them in daily practice). Interviewees also failed to identify the key players in the field and important policies in place. This is especially concerning, as some of our student body intend to work in the health systems of their respective countries of origin. We were failing to equip ourselves with the adequate, basic 'global' data. Hence, GHC established the Global Health Seminar Series to complement our previously organized lectures.

Despite our success as a group, we have been confronted with numerous barriers as we attempt to introduce this novel concept of global health, to our medical school. To begin, we had to overcome the busy schedules of students and faculty, work around cultural barriers involving laborers, and continuously lobby our own administration for more global health opportunities. It felt like reinventing the wheel. How does one approach global health from a non-Western perspective? This question highlights the differences in global health practice across countries. A medical student usually perceives global health as a service trip to Guatemala, a research project on a local refugee group, an immigrant at the emergency department, or a seminar addressing international health concerns. Although this perception may be shared by medical students from different geographies, its application varies.

As medical students experiencing everyday health, we recognized the need to join this global medical student movement. In summary, we recognized the need to create global health exchange programs, especially with our countries of origin, to demand a stronger curriculum to complement the clinical skills we practice at the hospital, to design research addressing our local global health problems, to advocate at the national level for better healthcare for migrants, and to nurture the growing interest in global health in our community. But, how do we achieve and sustain all of these initiatives? Here is where our hopes as graduating medical students come in.

Several resources exist on global health in American and UK medical school settings, but nothing regional. We have no guidelines for global health curricula, no networks connecting professionals with common interests, and no journals or conferences addressing our key issues, which for Qatar and other Gulf Cooperation countries are primarily related to the migrant workforce. On a regional level, our main health concerns relate to the ongoing conflicts resulting in millions of people being displaced within. Working with Syrian refugees in Lebanon through a Qatari NGO made me realize that students are often unaware of the available global health opportunities. This became especially apparent to me when I was approached by several classmates requesting international placements to serve these refugee populations.

Now is the time for global health to take root in our region as it has in the West, and to build a structure that will facilitate connections for professionals at different levels.

Our club has given us a platform to voice our opinions, demands, and projects, and as we prepare to transition into higher medical education, we hope that the definition of global health will go beyond including us.

Marwa Saleh is a student at Weill Cornell Medical School at Qatar.

The Paradox of Privacy: Reflections on Anonymity and Empowerment in a Global Health Intervention

By Jasleen Salwan

In ethics training for global health fieldwork, we are reminded that a patient's dignity depends vitally on doctor-patient confidentiality. When we neglect our duty to uphold the right to privacy, we place patients in an unacceptable position of vulnerability: they lose a part of themselves when they lose the ability to keep their own information to themselves. Without question, we believe that in global health interventions, confidentiality is particularly indispensable. We have a nebulous conception of the populations we work with abroad as "marginalized communities," and we assume that this renders them exquisitely sensitive to the vulnerability of compromised confidentiality. During most of my medical and global health coursework, I never thought to challenge this assumption. But last summer, when I implemented self-help groups for people with alcohol use disorders in Saint Vincent and the Grenadines (SVG)—a project that, on its face, would demand anonymity for all participants—adhering to Western standards of privacy proved not only unnecessary, but counterproductive.

From my early preparatory research on SVG, I gathered that while an intervention for alcohol use disorder was desperately needed, stigma would preclude many potential beneficiaries from participating. A middle-income country in the Eastern Caribbean with a population of just under 110,000, SVG has one of the highest rates of alcohol-related mortality worldwide. Prior to my trip, focus group discussions with local leaders in multiple target communities had highlighted not only a lack of resources to treat alcohol use disorders—there was no formal rehabilitation facility in the entire country—but also a pervasive shame in seeking what little help was available. From this information, I drew what seemed an obvious conclusion: my teammates and I would have to take great care to protect the identities of all who participated in the intervention. The self-help group form of the intervention, modelled after Alcoholics Anonymous (AA), would successfully

recruit participants only with the assurance that their anonymity would indeed be treated as sacred.

The previous year, another student from my medical school had launched pilot self-help groups in three SVG towns. When only one of them was still holding meetings a few months after she left, I again assumed that stigma was the barrier to sustaining the intervention. I imagined that more needed to be done to guarantee confidentiality and thus secure the trust of participants. Then something entirely unexpected happened: the self-help group that had remained active requested funding from my medical school for T-shirts to raise awareness about their membership. In a collaborative effort, they designed a message for the shirts that displayed personal pride in their individual struggles to achieve sobriety while making reference to their collective experiences living in a country prone to natural disasters. The front of the shirts read, "Alcohol can cause as much damage as a hurricane," and the back, "I can't control the weather, but I can control my drinking."

The fact that the self-help group members would wish to promote their group publicly—they even sent us a group photo of all of them wearing the shirts—immediately shook the assumptions I had held. I quickly realized that the participants were not demanding that we protect their identities, and I began to see the imposition of anonymity on their self-help group model as paternalistic. My teammates and I revised our interview and focus group questions to reflect our new understanding, and we brainstormed additional ways to help the group advertise. This change of direction certainly came as a surprise, but when I arrived in SVG and observed a meeting of the active self-help group, I was even more amazed.

AA meetings in the U.S. strive to be discreet: they are often held in a basement room of a church building, with the door closed and only first names used. The SVG self-help group held its meetings outdoors. They sat on the pavement of a street corner, or occasionally on benches in a park. In a country with such a tiny population, any passersby would doubtless recognize at least one of them—and indeed, one of their most vocal members had joined the group because he was curious as to what his fellow community members were discussing and soon realized that he, too, needed to confront his drinking problem. This same group member brought us a request even more surprising than the T-shirts: he wanted a local TV station to interview them about their experiences attaining abstinence through the group.

With the help of local community leaders, we were able to obtain a televised segment for the group. It was powerfully moving to see them all wear their T-shirts proudly before the cameras, and even more moving to hear them relate their collective journey toward sobriety. They urged anyone viewing the segment who was concerned about their drinking to join the group and to lean on them for support. They even singled out one of

their members who was struggling more than the rest to maintain abstinence, with all of them wishing him special luck. Throughout the interview, each member's feelings of pride and fulfillment were palpable. I now saw plainly that the traditional AA model's emphasis on anonymity had no place in this community. To deny these people an opportunity to speak publicly in the name of protecting them would only have eroded their dignity.

There is something inherently uncomfortable about the power dynamics between the Western healthcare provider and the developing country patient. No matter how much health care and education we supply, we can never dissolve the injustices that make us the donors and them the recipients. Perhaps it is to assuage our guilt that we instinctively redouble our commitment as guardians of patient information in global health settings. We may hold enormous privilege relative to those we serve, but at least we can prove ourselves worthy of their trust. This impulse is understandable, but we must recognize when patients are asking us not to safeguard their secrets but rather to help them empower themselves through sharing.

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Photo credit: Jasleen Salwan

One Bacteria Under All: A Perspective of a First Year Medical Student Working with Tuberculosis in Vitoria, Brazil

By Daniel Silva

The kombi bounced, screeched and jerked down the busy downtown streets of Vitória as Conrado and I desperately dug into the seat cushions for seatbelts. Filipe and Rafael looked back smiling, "Those seatbelts haven't surfaced in fifteen years!" Giving up, we did our best to hold onto the window frames as the busy Capixaba capital whizzed by against the backdrop of lush mountains and industrial piers.

We were our way to the home of a patient enrolled in the International Collaborations in Infectious Disease Research (ICIDR) study based at the Nucleo de Doencas Infeciosas at Hospital Universitário Cassiano Antonio de Moraes in Vitória, Brazil. The project aimed to characterize the transmission of *Mycobacterium tuberculosis* (mTB) in households by investigating biomarkers and epidemiology. Three friends and I came from Boston University School of Medicine to work with researchers and clinicians analyzing ICIDR data and visiting homes of study participants, while also rotating through infectious disease clinics. That day we were heading to a part of town that Rafael referred to as an "invasão," or unauthorized settlement. The dirt roads led to grassy back alleys, and the only identifiable landmark was a small supermarket where we met the patient's mother and father. They asked us to remove our white coats since they did not want to scare the family visiting from Rio de Janeiro who is unaware of their son's TB. We obliged and followed them down a narrow alley to their home.

It was humbling to enter someone's home with the expectation that I could offer some help. These are the patients I imagined myself working with when I decided that I wanted to be a doctor. Tuberculosis (TB) is an exciting field because it enables you to work with vulnerable communities in which effective medicine can make a meaningful difference. However, it was obviously apparent that I had a lot of work ahead of me in order to make an impact. My first step involved listening closely to the patients and learn

as much as I could from their experience. I heard happy stories of employment and family love, but more often heard sad stories of murders, financial obligations, and multiplying health concerns. I was confronted with the fact that TB was not the major cause of poor health in these patients, but rather a symptom of pervasive socioeconomic inequity. It is a correlation seen too often to doubt causality, but also remains to be rarely addressed by healthcare systems. That summer I learned how tackling TB household-by-household can trickle into strengthening a national healthcare system, providing a framework for equitable healthcare delivery.

The Sistema Único de Saúde (SUS), Brazil's federal healthcare system, was created following the 1988 Constitution that declared access to healthcare and essential medicines to be a human right. Many of the doctors I worked with endured a military dictatorship and considered the right to health to be a cornerstone of democracy. So it was unsurprising that they were confused by our celebration of the Supreme Court's passing of the Affordable Care Act. Things continued to remain confusing when we informed them that American healthcare operates much like a business. The Brazilian Constitution guaranteed universal healthcare and these doctors were trained to fulfill this promise. The doctors I worked with did not consider insurance coverage or cost, and believed patient advocacy was part of their job description. Though social determinants of health remained a didactic concept taught to me in class, the infectious disease doctors in Vitória preached them and lived with them every day. I was struck by this very obvious difference between healthcare delivery in Brazil and America.

SUS guarantees HIV/AIDS and TB medicines free-of-charge to all Brazilian citizens, and has become a model for national healthcare delivery. At the core of SUS is the Family Health Program (PSF), which provides community-oriented primary care for the majority of Brazilians. PSF serves as the foundation for many other healthcare initiatives in Brazil, including a National Indigenous Health Policy to address health disparities affecting indigenous communities. PSF further established unity through placing HIV/AIDS prevention and control programs in the hands of community health centers, and Directly Observed Treatment (DOT) for TB patients staffed by PSF Community Agents. When the TB programs were introduced, Brazil was firmly considered part of the "third-world," and in my lifetime I've seen Brazil develop into a "middle-income country." This transition was most evident to me when I began to see TB doctors trained to address the growing burden of non-communicable diseases, namely diabetes and hypertension. I was inspired by how addressing the needs of the most vulnerable populations was leading the way for attacking "first-world afflictions," which enhanced my pride in being Brazilian.

Throughout that summer I often heard TB referred to as a "democratic disease." It didn't make immediate sense to me since I considered TB a disease of poverty and a

symptom of social inequity. However, I came to understand that TB being referred to as democratic carried a double meaning. First, TB is democratic because it is an airborne disease, and no matter what class, race or community you come from you cannot avoid breathing. Secondly, due to its egalitarian nature the control of TB requires a concerted effort from government and civil society. TB is a unique disease because it does not rely on risky behaviors for transmission but rather on poverty, and has essentially become a biomarker of economic growth. TB is democratic because it requires cooperation and participation for effective control, and subsequently lays an infrastructure to confront future threats to public health. Working with TB taught me about the value equitable healthcare delivery and shared responsibility, and I will uphold those lessons throughout my medical career whether at home or abroad.

Daniel Silva is pursuing an MD at Boston University School of Medicine.

On Stars

By Lisa Simon

I fell in love with the stars first. Growing up in a light-polluted city, I was paralyzed with wonder during my first summer in rural New England, when on a clear night I gazed up at what to me seemed more stars than sky. When given the opportunity as a senior dental student to return to the area and work at a free clinic in Vermont, I thought of Boston's reddened, starless skies and jumped at the chance. "I will help people all day," I fantasized, "and hike and stargaze in my free time!"

There was, of course, less time for that than I'd imagined. Each morning brought a cluster of people in pain. Most had not been to the dentist in decades; many had come from the emergency department of local hospitals, desperate for care. I pulled more teeth my first day in the clinic than I had in 3 years of school. I grew accustomed to asking patients where they felt pain and having them answer "everywhere." I felt great sadness that the American healthcare system had failed so many, all because teeth were not considered important. I had expected my patient's oral health to be dire – it was why I had come here, after all – but I had not anticipated my own anguish in response. My heart broke for each of them: the mother who felt she could not find work because she was missing her front teeth; the 33 year old who expected to be toothless by 40, as his parents and grandparents had been; the 20 year old who could not remember a time when his teeth did not bring him pain.

But empathy was not enough. Each evening, people were sent away because I had taken longer than scheduled to extract a tooth or finish a filling that afternoon. Procedures took longer and were more uncomfortable because I was doing them. I stared at my hands and willed them to be faster, gentler, more able. I could do nothing but apologize – for my own shortcomings as a student and for the world that had brought my patients to me in the first place. I felt like I stood at the edge of a vast hole, one that grew deeper no matter how quickly I shoveled in earth.

When a star goes supernova, it can become so luminous and so energetic that it outshines whole galaxies and gives off more energy than the sun. It is to what my

student colleagues in global health and I aspire – to confront massive disparities and injustices and, with our skills and dedication, dazzlingly eliminate them. The unglamorous reality of student abilities stand in stark contrast to this dream. In that free clinic, doing the best I could, there were always patients turned away, always teeth I was forced to extract rather than save, always pain that went on far too long before I could treat it. My "best" wasn't big enough to straddle the need to which I bore witness; not yet.

This only made me feel guiltier when my patients responded not with frustration but with profound kindness. Each day we received homemade jams, fresh-baked cookies, and hand-frosted cakes (enough, noted the clinic director wryly, to give us all cavities). Hand-picked wildflowers gave way to baskets of apples as autumn began. When a supervisor pointed out an error in a filling I had done, my patients would wave away my apology and say, "I am happy to help you learn." They hissed through treatment on infected teeth that I couldn't fully anesthetize and thanked me when all was done. I feasted on their cookies and smiled as they left, but I could barely meet their eyes.

One way stars accumulate enough energy to undergo a supernova transformation is by absorbing it from neighboring stars. These "stellar companions" sacrifice their own material and energy to the nascent supernovae. With each passing day, I got faster. My fillings got smoother, my extractions more elegant. With each gentle touch, uncomplaining wait, and smile of reassurance, my stellar companions gave me energy to improve.

Seeing the depth of dental need in this rural community only strengthened my desire to alter the fabric of the healthcare system. But confronting it day after day as a mere trainee reminded me I will need more time, more training, and more help to make those lofty changes.

On my last day before returning to Boston, I removed an infected tooth for a young man. "Thank you!" he said, as I wrote an antibiotic prescription, "I was up all last night and I feel so much better."

"You're welcome." I responded. The extraction could have been gentler, I thought. The sutures could be straighter. But I had done my best, and next time I would be better. I smiled and shook his hand.

To imagine oneself that single incandescent star is hubris of the highest order. I look around and see my stellar companions, radiating patience and support for my goals. They believe that one day I will help others, so they will help me now. In rural Vermont, in urban Boston, and in all the settings where a student dentist might do some good, I have been surrounded by a constellation of other stars, luminous with kindness. It will be enough, I think, to glow among them.

One ∂ay . It is a promise to myself and to those who have given so deeply to my education as a student of global health. But until I can give back, all I can give, in limitless quantities, is gratitude.

Lisa Simon earned her dental degree from Harvard School of Dental Medicine in 2014. She is now a resident at Cambridge Health Alliance, working with an underserved population at a community health center.

Service and the Messiah Complex

By Manasvini Singh

"I want to help them. I want to make a difference."

As the beaming girl passed the ball to the person sitting next to her, I caught a glance of our mentor's face. There was an expression on her face that I couldn't quite fathom. A weary smile, a bemused cynicism. The boy, holding the ball, paused to think and then piped up, "I'm here because I felt like I can make a difference in their lives. I am so privileged to have grown up in America while these poor people have slaved their lives away in poverty. I feel like I can help."

After he passed the ball to me, I said the same thing everyone had said before me. I fleetingly wondered why the use of so many "I"s stuck out like discordant notes.

Three months later, the same setting – all 13 of us gathered together in a little restaurant in Nicaragua, picking at our beans and tamarind-flavored rice. The now (almost) harmonious buzz of mosquitoes heralded the setting of the sun. It was time for reflection again.

This time, however, gone were the fervor-tinged faces of my fellow interns. The hopefully passionate voices that spoke of change and the ushering of a new era of empathy and globalism were largely missing. They spoke, instead, of frustration, toil, and dissatisfaction with the inefficiently managed system and with being largely ignored. But most of all, they spoke of the helplessness associated with not being able to do anything that they had set out to do.

As I held the ball in my hands and felt the eyes of my peers and my mentor on me, I reflected on the last three months of my life as an intern at *Wuppertal Puesto de Salud*, in Matagalpa, Nicaragua.

When I got accepted into the internship with a small OB/GYN public health clinic serving the slums on the outskirts of the city, I had staggering dreams for what I was going to do. I had revolutionary ideas that would solve every problem that such a poor organization in such a poor country was sure to have. How could I not? I was educated, well to do, and well-traveled. I may have been only 19 and a junior in college, but I was

positive at the time that I was The One. I would deliver that little public health clinic from its misery.

I represented, at that point, the majority of most people who volunteer or work in developing countries. There is a self-righteousness to us that blinds us, a radicalism that matches the fervor of religious fanatics. We are the self-proclaimed messiahs of these countries, who think we will save them from poverty. We believe we will change the way they live while we are there, and that when we leave, our footprints will always remain in the hearts of all those we touched. If they follow our advice, they will be saved.

What fools we are. In my three months there, I was rudely slapped into self-awareness. Poverty is not a synonym for ignorance. I have never felt so miniscule, so completely irrelevant to the cause I wanted to dedicate myself to. As hundreds of patients poured into our tiny two-room clinic every day, I scurried around with the two doctors available to attend to them. I watched the doctors deal with grave circumstances with meager resources. They lent money from their salaries to no foreseeable return. They came early to poor working conditions and poor wages, and they left late. They counseled women to be strong, financially independent, and to pursue higher education, not knowing how many were actually able to do so. I watched fellow patients help each other deal with loss and trauma. And everyday, while I felt that my contribution was barely a drop in the pond, I learned more than I ever have in such a short span of time about leadership, compassion, and the power of the indomitable human spirit in times of hardship.



One of few doctors serving the rural sick in Matagalpa, Nicaragua. **Photo credit:** Manasvini Singh

There is strength in these people who we so often pity that we will never have. Entrenched in our wealth and comfort, sometime the strands of empathy that connect every human being get stretched a little too thin. There are rare jewels of humanity to be found in the field of global health, a fact that is often overshadowed by the physicality of the aid that we, as volunteers, people of service, or public health professionals, provide. Working in poor countries should not be an ego-boost. It is not dinnertime conversation, where everyone takes a moment of silence to remember "those poor people." It is not an opportunity to force our ideas of a perfect world onto people who are not in positions to resist. It is a symbiotic relationship between two parties sharing what they have an excess of. For me, I donated a small amount of my time and an extra pair of hands. In return, I was given an unforgettable life experience that solidified my choice to pursue public health as a career. I learned that they might need our help, but they certainly do not need our charity.

I looked up at my mentor. She smiled at me, and I finally realized with ringing clarity that this is what she had wanted us to take away from the entire experience. I do not think I changed anybody's life. At most, I may have saved them a few hours of work. In all honesty, I think they were doing and would continue to do perfectly fine without me. However, I do plan on returning once I am more qualified. And I will learn a little more about myself, this world, and the inexplicable link between the two.

Manasvini Singh is pursuing an MSPH in International Health at Johns Hopkins Bloomberg School of Public Health.

Cura Personalis and the Prevention of Paternalism

By Daniel Slubowski

Staring out the airplane window into the beautiful surrounding blue waters, I recognized one of America's greatest construction accomplishments of the 20th century: the Panama Canal. It was the summer after my first year of medical school, and I was traveling with fellow classmates, as well as students from other Jesuit medical schools, on the first-ever Jesuit Medical Collaborative trip. The unbelievable structure would be our group's introduction to a 10-day public health mission into the rural, indigenous communities of eastern Panama. As I admired its beauty, however, the words of Rubén Darío crept into my mind from my undergraduate studies (translated): "You are the United States/ you are the future invader/of the native America that has Indian blood/that still prays to Jesus Christ and still speaks Spanish." From his famous poem "To Roosevelt," Darío wrote this work as a protest to the imperialism of the United States, voicing against the over-reaching power of our nation into the affairs of Latin America, including the construction of the Panama Canal. I couldn't help but think: is our work an extension of this imperialistic nature? Are we promoting an environment of paternalism in our global public health mission? I had been so excited to provide help to a community that I did not imagine our work as a possible invasion of an established community. Cura personalis, a hallmark of the Jesuit faith and of our service trip, means "care for the entire person." Living this ideal during our global health mission not only helped us to bridge the cultural gap but also allowed us to form a medical collaboration with a community instead of presuming a position of paternalism.

Every individual has a story, a lesson that cannot be forgotten in the area of global health. The most meaningful and important aspect of our trip occurred before we even began our clinical work. Our group traveled to the Emberá community, the site of the indigenous people of Darien in East Panama. We had the opportunity to speak with a woman's grandparents about their experience with and perspectives on Western medicine. Translated from their indigenous language to Spanish by their granddaughter and then

from Spanish to English by our group leader, we learned of their reluctance to share the specific details of the medications they personally used in their community for illness. However, they did explain that they used certain plants to treat fever, arthritis, infection, and many other diseases. Dental health involved chewing on particular leaves that would initially turn their teeth black before removing plaque, which they explained to us while smiling with their pearly whites. When asked about their views of Western medicine, they mentioned their interest in getting to work with doctors further to help with newer diseases that were affecting their community, like cancer and new infections, which they had yet to solve. At the end of our conversation, they expressed their appreciation for our curiosity and gratitude for taking the time to learn about their culture. Gaining all this information on the first day of our clinical experience, I received my first realistic encounter with collaborative medicine since beginning medical school. How can I expect another person to appreciate my advice or follow my treatment plan if they do not feel like I understand his or her disposition? The basis of that strong physician-patient relationship comes from humility; I cannot truly help another human being until I fully undertake the effort to assume what they are experiencing. As I continue into my career as a physician, I have the memory of the people of the Emberá community to keep me humble and retain *Cura personalis* as a foundation of my future practice.

Participating in global health immersion projects is an arduous yet fulfilling experience. The greatest aspect of these trips, in my opinion, is not the recognition of differences between cultures but rather the appreciation of similarities. I have learned that no matter the country, we all search for happiness, and we all experience suffering. My future as a physician has been enriched by my experiences in global health, enforcing the concept of *Cura personalis* to better know the whole person and seek out those human commonalities. I have learned that it takes humility, assuming the condition of another, in order to form a productive collaboration with patients. With this knowledge, Rubén Darío can rest assured that paternalism has no place in my future practice as a physician, internationally or at home.

Dan Slubowski is a 4th-year medical student at Creighton University School of Medicine going into the specialty of Emergency Medicine. He graduated from the University of Notre Dame with a BS in Biological Sciences and a BA in Spanish.

More Valuable Than Money

By Melody Tan

It was in Ethiopia that I finally grasped the complexities of aid. Walking through the dusty streets of Addis Ababa, it was impossible to avoid beggars as they called out, "Sister ..." asking for a couple *birr*. The children stared at me and touched their mouths in a silent plea for food. Each day I saw them, and each day I walked by.

It was inaction my younger self would have condemned. I was an empathetic child, passionate about righting global injustices and inequalities. For years, I gave to non-profits, assured that my donations were directly improving lives. But gradually, persistent questions began to erode my foundation in the traditional aid philosophy. Then, my trip to Ethiopia became the catalyst for further reflection on the traditional forms of Western aid and reconsideration of my views.

I was in Ethiopia with the task of creating an inventory of medical devices at several hospitals in Addis Ababa. This was a first step in a collaboration between my American university and two Ethiopian institutions to develop their biomedical engineering curriculum, which would then facilitate the development of local engineering capacity and the repair of medical devices. By day, I went from hospital department to department, meticulously cataloging the status of each piece of equipment.

Then, each night after the sun went down and it was no longer safe to go out, I spent my time reading. I read arguments against foreign aid, perspectives that had eluded me before. I read of food, clothing, and even mosquito net donations that destroyed homegrown businesses and perpetuated a culture of dependency. Daily, I walked by beggars and the homeless, whom it was evident the aid dollars never reached. At the city hospitals, I saw storerooms of unusable equipment collecting dust, some still in their UNICEF and USAID boxes. I heard that during a recent famine, the government exported food, while international food aid poured in and thousands starved. As I read accusations that the inflow of foreign dollars hampered development, I witnessed the truth of these charges in my everyday experience of the country.

I could see that current methods of aid were widely ineffective. My experience taught me to be cynical. But I also strongly believed that cynicism could never be an excuse to do nothing. This pushed me to find my own role: How could I contribute in an effective and sustainable way?

To begin answering this question, I looked to my current work with broken medical devices. As I spent time in hospitals, I saw a dependence on donated equipment and a severe lack of capacity for the upkeep of this equipment. I visited several 100+ bed hospitals with only a couple minimally-trained technicians responsible for the maintenance and repair of all medical devices. When these technicians learned of the overarching purpose behind my inventory work, all expressed great enthusiasm for the development of local engineering capacity to supplement their skills and resources. I drew from this experience the value of being able to impart transferrable skills--the development of structure rather than provision of a palliative. Furthermore, I believe this to be a way around the aid conundrum, articulated best by the Ethiopian professor who told me, "Ideas are more valuable than money."

While I know it will never get easier for me to walk past the beggars on the street, they are my motivation for creating systemic change. I now aim to use my own background in engineering as a bridge to work between the developed world and developing world. It is my hope that by channeling the flow of ideas and skills between these two spheres, my efforts will bring closer a future where this partition will cease to exist.

Melody Tan graduated from Rice University in 2014 with a degree in Bioengineering and Global Health Technologies. She is currently a master's student at the Johns Hopkins Center for Bioengineering Innovation and Design.



Broken equipment abandoned outside a hospital in Addis Ababa, Ethiopia. **Photo Credit:** Melody Tan

Freedom

By Carmelle Tsai

He hangs his head. He stares blankly into the floor. He buries his face in his hands.

He is a tall and well-built man. Physically strong. Powerful.

And he won't look up at me.

Beneath the strength, beneath the man, is something greater 'ka gulu' (far greater) than he ever feared.

Evil. Deceivingly powerful. Alluringly strong, yet leaving only helplessness and weakness in its wake.

It is not the fact that he abuses his wife.

It is not the fact that he uses sex as a means.

It is not the fact that he is unfaithful.

It is not the fact that he was incarcerated until a mere day before walking into my exam room.

It is not the fact that he is part of why his daughter has HIV.

It is not the fact that he is why his beloved daughter has no mother.

It is not the fact that he played roulette with his daughter's life by causing her to miss her life-giving medication.

It is the shame. The brokenness of poverty and cruelty of an unfair world start the battle. But the shame is what strikes a man behind the knees and cripples him from becoming a redemption story.

I want him to look up at me. I want him to look *into* my eyes, not past them. As his 'dokotela' (doctor) I have but a few stern admonishing words about how important it is that he keep his sweet baby on her anti-retroviral therapy. The deep cistern in my heart that holds the smiles and tears of the kids I love is *raging* on behalf of his daughter.

So I need him to look into my eyes. I need him to be able to look inside. Past the harsh, past the disappointment, and into the place in my soul where love still lives. Into the place where something inexplicable that I don't deserve to consider mine flows out and softens my cold stare into a look of compassion. When my words cannot express

and where my heart fights conflict, my eyes reveal a bare-naked view of the part of my heart that is not mine and is not a captive of shame but of love and hope. The part that is 0% me and 100% pure grace.

I am a small-framed female 'muzungu' (American) who probably weighs barely half what this muscular African man who has seen real *pain* weighs. He can probably bench press me. I am sitting across from this man, alone in an exam room.

But, I am not scared. Instead, my heart is breaking. It is painfully clear how utterly broken this situation is. The only thing I can't figure out is whether I am breaking more for the captivity of his shame, or the broken hearts of his baby girl and wife.

It's strange and teeters on the edge of feeling wrong for me to say this, but I think I love this man like I love my patients who are women abandoned by their men, or kids I wish I could take home with me. It does not elicit the same pangs that come from the melted hearts and smiles of broken women and children. But its intensity? It burns with the same fire.

I love this man. Not because he has ravaged the lives of others. But because I know the shame that causes him to hang his head, stare blankly past my eyes, and bury his face in his hands is the greatest prison of all.

This is the shame that I have seen in the glassy eyes of my schizophrenic patient on the eve of the anniversary of his child's death. It is the same shame I have seen in the frightened eyes of my 2-month-old patient's mother when she brought in her seizing baby. It is the same shame that I have seen in the deep eyes of the man who broke my heart.

It is the same shame that I have seen in my own mirror before.

The more I have been present in the most broken and shameful parts of people's lives—whether through third-world problems, or first-world problems—the more I understand that whether or not the surface problem is starvation or addiction, there is something inside us all that is so much the same. Oh, how we all hurt. Our hearts all break. We all can be so imprisoned by whatever wrecked our lives and caused us shame.

But I have also found that conversely, though the cause of brokenness is so very different, the hurt binds us together. We all need the same key to set us free. And I've found that all I want as a 'dokotela' is to give medicine as my messenger of hope. Hope of experiencing and understanding love. The set-you-free kind of love. The one that brought me out of my shame.

It's not about fancy programs. Or really good research statistics. Or awesome educational materials. Or even money. Those are all important and helpful, but in the end I hope that when it comes down to it, the bottom line remains the raw love that I still believe can be bigger than shame and brokenness.

Oh, David*. You are more loved than you ever hoped. And that love is *grace*. Look up at me.

Look up at me. Into my eyes. Find grace, David.

Oh, find grace.

*Pseudonym for my patient

Carmelle Tsai obtained her medical degree from Baylor College of Medicine and is currently a Pediatrics Resident at University of Texas, Southwestern – Children's Medical Center. She also holds a B.S. in Engineering from Franklin W. Olin College of Engineering.

A Couple Hours

By Lillian Tsai

A couple hours. Enough time to see several patients in clinic. Enough time to drink a few packets of oral rehydration salts (ORS). Enough time to fly from Atlanta to Boston. But not enough time to navigate the bumpy, convoluted roads of the Bangladeshi countryside. Not enough time for the ashen-faced man wrapped in dark blue blankets now lying before me.

His face was surprisingly blank. I expected to see some sign of struggle, some remnant of his last thoughts or emotions etched across his peacefully smooth forehead, but I saw nothing. However, hypotheticals spun ceaselessly in my head. What if he had a few packets of ORS at home? What if there had been a hospital closer to his village? What if he had been able to arrive at the hospital just a couple of hours earlier?

When I first stepped into the International Centre for Diarrhoeal Disease Research (ICDDR,B) in Dhaka, Bangladesh, I was met by hundreds of blank stares. Endless rows of cots were lined in an overflowing white tent outside the hospital. Each shiny green plastic cot had a hole cut out for diarrhea to flow freely into a bucket beneath it. Among the hundreds of faces, there were only a handful of doctors distributing their attention to patients all around them.

A couple hours after arriving home from the hospital, my roommate stumbled into my bedroom and promptly crumpled to the floor. Having only been in Bangladesh for a few days, I had looked up emergency phone numbers, which I never thought would be necessary. As she regained consciousness, I called an ambulance and poured her some ORS. At the hospital, the doctor diagnosed her with shigellosis, and she remained strong as long as she was rehydrated. Over the next two weeks of her recovery, we began to understand each other. I found that she hated having to drink ORS, preferring to pour glasses of the liquid down the sink instead. I persuaded her to drink the ORS in exchange for rice porridge that would soothe her stomach. In her misery, she was also reluctant to collect stool samples. However, we had long conversations every day and by the end of those two trying weeks, we became close friends.

The blank faces in the hospital now invited me to delve deeper. A fragile young girl sitting alone in the large white tent peered at me with wide, unyielding eyes.

"Kemon aso? (How are you?)" I asked as I bent down to greet her.

"Bhalo! (Good!)," she exclaimed, with her face breaking out into a delighted smile.

I was amazed that my small gesture could elicit such a bold reaction. Encouraged, my roommate and I began learning Bangla (Bengali) phrases from a co-worker at the hospital. After work, we explored Dhaka together and returned to her university to exchange ideas. We often talked about our families and explained cultural practices and differences to each other. I recall one day speaking about the loss of her loved ones to widespread and treatable infectious diseases.

As I listened, I remembered the stream of neon pink water I saw running through the slums in Dhaka. I recognized that the living conditions that breed infectious diseases are extremely difficult to change, especially on a large scale. Therefore the development of reliable, affordable vaccines is vital to combat these life-threatening diseases, at least until infrastructural improvements are made to provide safe water in the communities.



A stream of neon pink water running through the slums of Mirpur, Bangladesh.

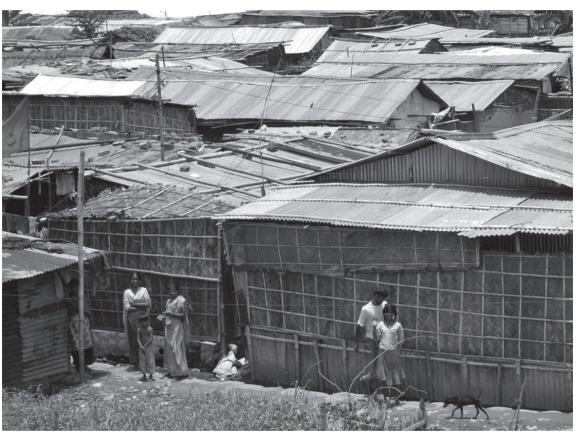
Photo credit: Lillian Tsai

When I look back on my time in Bangladesh, I remember all the friends and patients who touched my heart. Memories of countless faces have stuck with me long after I left –mothers nursing their malnourished babies in the maternity ward, the chapped lips that constantly begged for water, but also the joyful sparkle in the eyes of the children that ran through the slums. As I continue to explore various diseases that afflict global populations, I begin to comprehend the magnitude of the burden of disease, ranging from dengue fever in Nicaragua to HIV in the United States. I am appalled and saddened at the thought of millions of people around the world, just like those in Bangladesh, who arrive at a hospital a couple hours too late. However, memories of the patients and new friends I have encountered urge me to take action. They are the ones that motivate me to learn about cutting-edge research, pour long hours into my own research and medical studies, and have hope that in the future I will contribute to medicine in a way that will bring them relief and joy.

Lillian Tsai is a medical student at Emory University School of Medicine.



Children play along the river in Matlab, Bangladesh. **Photo credit:** Lillian Tsai



A friendly hand wave in the slums of Mirpur, Bangladesh. **Photo credit:** Lillian Tsai

Translating Compassion into Impact

By Shawn Wen

With phrases like "promoting health worldwide," developing innovative technologies for the "bottom-of-the-pyramid," and reaching the "last mile," I often find the language of global health to be vague and impersonal. What makes global health come alive for me is viewing it as action inspired by human connection and compassion. With global health, it has to be personal, simply because the connections and relationships we forge give us the lasting strength and focus required for overcoming the unforeseeable obstacles that inevitably arise when working at the frontlines of global health.

But where do we find the motivation to take action in the first place? I think it comes from firsthand exposure and engagement. It comes from fully immersing oneself in a developing country and establishing meaningful cross-cultural bonds by approaching every person, regardless of differences in social standing, cultural heritage, belief system, and health status, with an open heart and a genuine desire to learn something new about oneself, others, and ultimately the common threads that connect us all. My first exposure to global health was when I hopped on a plane to spend four weeks by myself in India with no agenda except to test my resilience, take risks, and learn from being completely outside my comfort zone. The unexpected result was a completely transformed view of the world and my role in it.

As an aspiring physician, I sought to gain perspective by spending time first at a private hospital and then two of the largest public hospitals in New Delhi. I had previously read that public spending on healthcare in India is staggeringly low (0.94% GDP), and that private out-of-pocket expenditures account for roughly 80% of total health spending. I saw how these statistics translate into drastically unequal delivery of quality health services between the public and private sectors. I tried to identify the root cause of these inequalities, but the more I tried, the more I realized that one root cause didn't exist. There was no single pathology in the system that I could pat myself on the back for diagnosing.

Here within lies what I see to be the greatest challenge in global health: Everything is interconnected, and there is no isolated fix. If global health is about promoting healthy behavior and not just about reacting to diseases, then level of infrastructure, sanitation measures, health education, public policy, physical access to hospitals, and social attitudes towards hospitals, doctors, and allopathic medicine all become just as influential on health outcomes as drugs and treatments themselves. The silver lining of all this is that because global health encompasses so many domains, we can and should take an interdisciplinary approach towards building solutions. Physicians and scientists obviously have valuable skills and insights to contribute, but so do economists, business people, government officials, policy makers, designers, urban planners, and yes, even undergraduate students. I won't wait until medical school to turn compassion into impact simply because I refuse to believe I have to.

As a fellow in MIT International Development Initiative's Technology Dissemination Program, I have been working on a collaboration between MIT D-Lab and Massachusetts General Hospital to develop a novel, electricity-free incubator enabling blood culture-based typhoid diagnostics in extremely resources-limited healthcare settings. Lessons in business and user-centered design tell us that we must understand and cater to the specific needs and preferences of our target user. Our users, health workers at rural health posts, cannot currently perform blood cultures to diagnose typhoid because they lack access to reliable electricity and microbiology facilities. Our solution? A novel diagnostic system that leverages a simple-to-operate, portable, and electricity-free incubator, as well as a blood culture test that can be read even by those with little to no medical training.

I spent the summer of 2012 in Nepal, our pilot country, working on a clinical trial at Patan Hospital to validate our diagnostic system, training doctors and nurses to operate the electricity-free incubator, and collecting feedback through field interviews with health workers at twenty peri-urban and rural health posts. We successfully proved our system works and collected very positive feedback from our target users, but we have a long road ahead. Sustainable and scalable solutions not only address user needs and preferences, but also create shared value for all stakeholders, foster collaboration such as public-private partnerships, maximize local knowledge and ingenuity, leverage existing infrastructures, synergize with local and international NGOs, and achieve financial solvency. To do all this takes time and a baseline understanding that there will be enormous barriers moving forward. But I push on because I hold myself accountable to the health workers who do heroic work in their communities despite having inadequate resources. They refuse to fail their communities even though the system has failed them. I decide to push on because I can't fail them too.

I believe that an important component of advancing global health is showing young people that they are never too young to contribute. Young people intimately engaged in global health should be a norm, not an exception, because innovative and creative solutions can and do come from brilliantly young minds. I have had the privilege of working alongside amazingly experienced and accomplished individuals from MGH, Patan Hospital, and MIT, but never once did they make me feel my ideas were less valuable or less worth pursuing. I think spreading this sentiment will spur the next generation of committed action-takers and leaders in global health. By allowing ourselves to be moved and infuriated by the injustices we witness, and by believing in our own capabilities to be a powerful agent of change no matter what age, we can each contribute towards a better, healthier world.

Shawn is an MIT D-Lab Scale-Ups Fellow. holds a BS in Brain and Cognitive Sciences from MIT, and researches at UCSF's Malaria Elimination Initiative.

The Last Cup of Milk

By Jennifer Zambriski

As a global society, we enter a state of alarm when faced with the loss of a species. We sign international treaties; we enter into contracts; we enact laws. We do this because species extinction is a loss suffered globally. But, what if instead of facing species extinction we were confronted with a different type of extinction entirely? What do we do when faced with the imminent loss of a centuries-old culture that is ripe with indigenous knowledge, that is steeped in history and tradition, and that is as much a part of the African landscape as the prides of lions, the herds of antelope, and the sprawling branches of the Acacia trees. What do we do then?

As I was preparing for the journey to the Borana region of southern Ethiopia, my inbox suddenly flooded. There was a surge of e-mails, each one providing new and progressively more disconcerting information on the current state of crisis. Climate change had caused the worst drought the area had experienced in six decades; the landscape was ravaged. As a result, Borana had been deemed one of the most foodinsecure regions in the world, which meant that the casualties due to starvation had become too numerous to count. Experts were anticipating that nearly three-quarters of the livestock in the region would perish in the drought's wake, and by extension, I knew the loss of human life would be just as devastating.

I was traveling to Borana not as a tourist but as a veterinarian and Ph.D. student. I was a member of a unique interdisciplinary team that had been charged with providing a multifaceted assessment of the famine and evaluating the validity and feasibility of a new intervention. I would immerse myself fully in Borana in order to collaborate with nutritionists, economists, engineers, and physicians.

In the months prior, we spent countless hours planning and formulating and reformulating surveys. We were preparing to interview Boran men, women, and elders in order to discern how they were coping with the drought. As I filtered through my e-mail one morning, each message more discouraging than the last, it dawned on me

that no amount of planning could fully prepare me. I braced myself, unsure of what I was truly bracing for.

The Boran are nomadic pastoralists, meaning that they herd livestock over vast expanses of land in search of pasture and water. The relationship shared between the Boran and their cattle is elegant in its simplicity and symbiosis. The Boran nourish the cattle, and in return, the cattle nourish the Boran. The milk from a Boran cow doesn't simply serve to sustain life; it ushers it forward. When a Boran infant is named, his mother and grandmother build a hut in his honor and adorn it with traditional milking equipment. Members of his clan present him with a cow, in celebration of the newest life, and are thanked with a cup of milk. On his third birthday, he will be entrusted with the care of his own calf, and by the time he is a teenager, he will have developed an impressive acumen of traditional medicine. As a veterinarian, trained in elite universities, I am inspired by this phenomenon. The Boran have an indigenous knowledge of animal health that is vast in breadth and depth. Tuition cannot buy this knowledge; it must be inherited.

As we traveled further and further south, the landscape became more barren and inhospitable. The trees withered and died. The grass turned into sand. Eventually, all signs of life perished. The landscape was austere and punctuated with the corpses of cattle, their bones picked clean by vultures. In Borana, only the vultures are food-secure.

In the subsequent weeks, I spent countless hours talking with the Boran, teasing out the details of daily life and existence and trying to understand their plight as they did. Women were spending six hours a day walking to collect water, which meant that their daughters were being pulled out of school in order to help maintain the household. The cattle were no longer making milk because they were too malnourished to spare the energy. Pregnant women were skipping meals, explaining that no one hears the cries of the unborn, and that no one can ignore the cries of the famished children standing before them.

A profound feeling of hopelessness consumed me. And so I asked, "Do you think that your children and grandchildren will be pastoralists like your fathers and grandfathers?" The response was unanimous. "No." When I inquired as to why, I was met with the melodic voice of a Boran man with strong features and leathered skin. Resting at his side was his herding rod, an implement of work, but so long carried in his hands that it had become an extension of his self. Around his right wrist was a bracelet made from the hide and dew claw of a goat, and on his middle finger, a ring made from the vertebrae of a calf, inherited from his great-grandfather. He spoke slowly and deliberately, his voice caught in his throat, and the emotion welled in his eyes. Before the translation ever resonated in my ears, his despair resonated in my heart. He explained to me that the climate was simply too unreliable, and that owning cattle and depending on them for livelihood was

simply too great of a risk. "Without the rain, there is no pasture. And if the cattle die, the Boran die too. My cattle are my spirit, my character, my very being. Without them, I can no longer call myself Boran."

Losing your livelihood is tragic; losing your identity is catastrophic. The cattle are dying, and the Boran culture and its people are following them to the grave. The world is at risk of losing the Boran forever, and yet the world is idle. What will we do on the day the last cow dies in Borana and the last Boran lays down his herding rod, hangs his head, and walks away? What will we do then?

Jennifer Zambriski holds a PhD in Epidemiology from Cornell University DVM.

Two Scissors

By Tracy Zander

If they did not take the obviously recognizable shape of scissors, scissors would be one of the last terms I would use to define them. The tight soreness of my hand muscles and the immediate throb as I would finish 'cutting' just one of many donated bed sheets and tablecloths into equal pieces was a clear sign that the blunt cutting utensil was long past the prime of its shearing life. Sweat would drip down my face, partly due to the blisteringly hot Port-au-Prince sun and partly due to the frustrating level of unproductivity the scissors forced me to work at. The edges I cut were jagged and crooked, despite the fairly large examining table I had to spread the material out. Once upon a time, probably in United States, the scissors had enjoyed a full life before joining the plethora of donated items to Haiti. Now, on the island, day after day, cloth after cloth, the two blades eventually gave up in protest. As if they knew why they were being used ...

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Two-month-old baby Emmanuel lay listless on the large examining table. Emmanuel had diarrhea for eight days. His dry mouth, sunken eyes, and tearless cry were enough for the physician to diagnose severe dehydration. The child passively accepted failed attempts to insert the needle into the dried veins in his arms and even in his bald head after shaving his orange-tinted hair (a sign of malnutrition). Finally, an intraosseous infusion was performed. As the needle probed directly into the bone below his knee, Emmanuel hardly reacted. His mother cringed as she realized how gravely ill her baby was. She was too malnourished to produce breast milk, forcing her to give the child either water, food, or artificial milk, likely contaminated with dirty water, that little Emmanuel's body just could not handle.

Immediately after landing in Miami from Haiti, I traveled with my cousin, a realestate journalist, to a groundbreaking event. This called for heels and a cocktail dress. As we pulled up to the red carpet leading to the event, I was quickly forced into the realization that I was not in Haiti anymore. As my cousin interviewed multi-millionaire architects, developers, stockbrokers, and real estate agents, I attempted small talk while trying to wrap my mind around the contrast between the life I led the previous month and the one I stepped back into just hours before. Of course, I took advantage of the seemingly infinite number of hors d'oeuvres, drinks, and desserts offered to me, however, it seemed just as unfitting as having to put makeup on for the first time in four weeks.

A beautiful, thick ribbon with the developer's repeating, trendy logo spanned across the stage. I watched from afar, still getting an occasional look from all the other girls who wouldn't dare ingest as many calories as I was consuming, thanks to the free food. One by one, the most important people, likely the wealthiest, were called to the stage. All stood holding a piece of ribbon as the main developer was handed a pair of scissors larger than the length of my arm. I barely saw him even cut as the direct contact of the sharp blade on the silk was all that was needed for a seamless cut.

A wave of sadness, frustration, and disbelief swept over me as I remembered my little buddy, Emmanuel, and his painful struggle for life. He battled over-rehydration and suffered numerous fevers and bouts of acidosis. I stood by his bed, kissed his forehead, massaged his tiny arms and legs, sang to him, pleaded for him to keep fighting, and prayed for him over and over. But just two days after his arrival to the clinic, Emmanuel's soul would rise to Heaven and his precious body would be placed in one of the very roughly-cut burial shrouds that I had tried so hard to make the useless scissors cut.

These dichotomies exist everywhere. We live in a time where disparities in healthcare, education, resources, and income are the greatest our cities, nation, and world have ever seen. I've seen the numerical data and studied the statistics, but the alarming clarity of such concepts only just made sense to me through the image of two very different pairs of scissors. It is a difficult realization to swallow—in order to thrive in this society, we are conditioned to adhere to certain social norms that are at the heart of the problems perpetrating the injustices. However, as much as I worry and feel discouraged, I am also prayerful and hopeful. In Haiti, there is a proverb that reads, "Lespwa fé viv," or in English, "Hope makes us live." And if Emmanuel's mother still has the courage to repeat those words, the rest of the world should too.

Tracy graduated with a Master's in Public Health from Saint Louis University College for Public Health and Social Justice concentrating in Maternal and Child Health, and plans to become a physician.

Endnotes

- www.cugh.org Accessed June 2014.
- Schillebeeckx E. Church: the human story of God, trans., John Bowden. New York: Crossroad, 1990, 1-40.
- Aronson L, Niehaus B, Hill-Sakurai L, Lai C, O'Sullivan PS. (2012) A comparison of two methods of teaching reflective ability in Year 3 medical students. Me∂ E∂: 46, 807-814. doi: 10.1111/j. 1365-2923.2012.04299.x
- ⁴ Aronson, L., Niehaus, B., Devries, C., Siegel, J., & O'Sullivan, P. (2010). Do Writing and Storytelling Skill Influence Assessment of Reflective Ability in Medical Students' Written Reflections? *Academic Medicine* 85(10 suppl), S29-32. doi: 10.1097/ACM.0b013e3181ed3aa7
- Wald, H., Davis, S., Reis, S., Monroe, A, & Borkan, J. (2009). Reflection on Reflections: Enhancement of Medica Education Curriculum With Structured Field Notes and Guided Feedback. *Academic Medicine*, 84(7), 830-837. doi: 10.1097/ACM.0b013e3181a8592f
- Aronson L, Niehaus B, Hill-Sakurai L, Lai C, O'Sullivan PS. (2012) A comparison of two methods of teaching reflective ability in Year 3 medical students. Me∂ E∂: 46, 807-814. doi: 10.1111/j. 1365-2923.2012.04299.x