A Challenge for Tomorrow's Physicians

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Whether in Southeast Asia or Central America, the patients which stand out most in my mind are those who present with rare conditions. I specifically think about the cases that resemble those described in JAMA and NEJM, those rare diseases vaguely mentioned in Harrison’s or those that inspire a surgeon to say, “In 35 years of practice, this is the first time…” As part of the Pacific Partnership humanitarian mission aboard the US Navy Ship Mercy, I knew that what I was experiencing was truly a rare opportunity that I would never take for granted. I was reassured multiple times that I was seeing diseases I would only read about once I was in medical school. It was natural to gravitate towards these patients; all the physicians I aspired to be like did so themselves. Recalling those summer days aboard, when my ears perked up any time I heard a doctor’s “ohh’s” and “ahh’s” because of the possibility of a rare finding, I wonder if we let down more patients than we helped.

Although the mission participants’ intentions were certainly in the right place, far too often the miracle cure or the heroic surgery overshadowed the opportunity to do some real good. I often wonder if we missed the opportunity to improve the future health of the community through initiatives such as immunization efforts or maternal and childhood health education. I regularly ask myself if we lost the chance to perform the kind of interventions that affect populations, rather than just individuals, with results that could transcend generations.

Many consider the 19th century the birth of modern medicine. As the scientific field began to advance rapidly, physicians began to take a more systemic approach to symptoms and diagnosis. Old ideas of disease were being replaced by the concepts of bacteriology and virology. Though, the science of health care was still in its infancy with limited therapeutic knowledge, progression occurred through a series of breakthroughs. The stories read in a similar, yet exciting fashion. From the race among surgeons to perform the first human heart transplant, to the race among researchers to understand HIV, or as recently as the race to complete the sequencing of the human genome, the story is familiar. There was a cast of larger than life characters facing a plethora of challenges and unknowns. No one would question the success of heart transplants, the lives saved from antiretroviral therapy, or the potential from sequencing the human genome. However, our generation’s greatest challenge, if achieved, will require a different narrative.

This past summer, I was incredibly fortunate to have been offered a fellowship at the World Health Organization in Geneva, Switzerland. As part of the fellowship I interned within the
Department of Noncommunicable Diseases and Mental Health. Additionally, I was lucky to have been in Geneva during the World Health Assembly. Throughout my time in Geneva, it became clear to me that my generation’s doctors will not be defined by great medical breakthroughs. Instead, we are challenged by the colossal task of devising creative ways of making these previous breakthroughs accessible to all in an affordable, efficient, sustainable, and safe system.

To be clear, I think innovation and medical breakthroughs are as important and relevant as ever. I am not arguing against them, or downplaying the development of treatments for neglected diseases or heroic surgeries to cure rare disorders. Rather, my argument is that we solutions available to those who need them, when they need them.

During the World Health Assembly, I was extremely fortunate to have the opportunity to listen to Dr. Margaret Chan, the Director General of WHO. During her speech, she said, “We know we have to influence people at the top, but it is people at the bottom who matter most.” As health care providers in the United States, we are known for innovation and heroic treatment. Unfortunately, our system may be defined by the extraordinary prices we pay for ordinary care. We have managed to price-out a significant percentage of our population. The measure of a health system is only as great as the health of its poorest and sickest patients, and it is here that we have failed.

have reached a point in medicine that our predecessors never even dreamed of accomplishing. There was an undeniable quest to better understand diseases and, consequently, the tools needed to cure them. Physicians worked tirelessly to understand the pathology of illness and symptoms and the way to reverse or stop the biomolecular errors that occur in each. In 1949, the International Classification of Disease (ICD) started to resemble its current format; the list included a little over 4,800 entries. By comparison, today the list includes well over 14,400 entries with more than 4,000 procedures and 6,000 drugs to treat them. It is our job to make sure that the important work of those before us does not become a combination of codes in a billing manual, but rather real life

The challenges are never as straightforward as they seem. As medical students, we are accustomed to learning how intricate webs of information all relate to one another and ultimately affect the outcome of the patient. For example, an enzyme deficiency, which presents as a respiratory symptom, ultimately stems all the way back to a genetic defect. As medical students and future physicians, we thrive in navigating these connections. It is what we’ve been trained to do.

Take, for example, a patient who suffers from chronic asthma. As medical students, we are trained to help this patient in a few ways, likely by offering a combination of steroids and an inhaler. Any medical student will undoubtedly be
aware of external factors that can lead to and exacerbate asthma, but most cede these challenges to other sectors. However, we must understand that when we limit ourselves to the walls of our clinic, we are fighting a battle we have already lost. Poor ventilation, pollutants, and overpopulated housing are all aggravating factors that the patient returns to at home. Undoubtedly, this patient will return to the clinic within a few days—weeks if they’re lucky—and the exchange between the patient and doctor will be the same as before. In 2008, the World Health Organization articulated this dilemma in the most straightforward terms. “Why treat people only to send them back to the conditions that made them sick in the first place?”

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In failing to realize and understand these types of challenges, we have created an extremely wasteful and inefficient health care system. Every dollar we overspend or misspend on health care, we subtract from education, housing, and other services that have been shown to contribute to good health as much as medical health care. These are observations and connections that, as health care providers, we are able to experience. It is our responsibility to undertake the gargantuan task of curing this epidemic of inefficiency.

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Whether inside the General Assembly building across the street from my medical school or in the United Nations conference room in Geneva, I find that my medical colleagues are outnumbered far too often. It is too common for those who have never been on the front lines of health care to make decisions that not only affect the way we practice medicine and deliver health care, but also how our patients access that care. As health care providers, we are equipped with both the knowledge and experience to shape the way we make our patients healthier.

REFERENCES
