

Chapter 5

A Global Perspective on Health Care



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Introduction

Most readers of this text (*Your Story/Our Story*) live in First World countries, designated as having high levels of life expectancy at birth and education by age 25, as well as a high Human Development Index, Gross Domestic Product indicator, and Press Freedom Index [1]. When we go to our worksite as healthcare providers, we give little thought to the resources we will use during our shifts. We anticipate that the operating room will be provisioned with sterile equipment, that the ventilators will be powered by electricity, that the cardiac catheterization lab will be able to open within minutes, that there will be incubators for premature newborns, and that well-equipped ambulances will be available to transport even non-emergent patients to the emergency department. Our research endeavors and quality assurance projects focus on increasing the quality, efficacy, and efficiency of the practice of medicine. However, there is a vast difference between the medicine that is practiced in the First World and the health care that is available to most of the earth's inhabitants.¹

Discussion

Each year, upward of two million Americans participate in short-term medical mission trips, and about half of those participants have no formal medical training [2]. Websites advertise to medical professionals seeking an opportunity for travel: "Are

¹Attributed to Professor Lee Wallis, Immediate Past President of the International Federation of Emergency Medicine and Past President of the African Federation of Emergency Medicine.

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you frustrated and stressed from medical practice in the United States? Do you enjoy travel or have a yearning to help others? If so, why not try a volunteer vacation?" [3]. Other websites encourage medical students and college students interested in considering medicine as a career to participate in mission trips as a way to advance their medical skills by practicing examinations and procedures that they would not be permitted to do in their home country because of their lack of training and credentials [4]. Medical mission trips are often self-funded by medical professionals or funded by crowdsourcing and organizational donations raised by participants. Multiple ethical issues compromise the reputation of such trips, such as, best use of monetary contributions, ethical care of patients, sustainability, and value of skills taught.

A recent article described a mission trip undertaken by 18 college students who worked at an orphanage in Honduras for their spring break. The students raised \$25,000 to pay for the trip, and many of them reported that it was a life-changing event for them. However, the orphanage's yearly budget of \$45,000 covers staff salaries, building maintenance, and food and clothes for the children. One of the permanent missionaries commented that she knew that the trip benefited the students far more than it benefited the orphans, and the orphanage administrator stated, "We could have done so much with that money" [5]. We exist in a global economy that annually spends the equivalent of US\$400 billion on recreational narcotics, where Japanese businessmen spend US\$35 billion for business-related entertainment, and where American and European Union consumers spend US\$12 billion on perfume. In comparison, only US\$13 billion is spent on basic health and nutrition and only US\$9 billion is spent on water sanitation [6]. Clearly, the advantage of having a healthy population of global citizens is not obvious to many governments or many individuals in control of organizational budgets, or other needs are deemed more pressing. In a world where the average annual salary in purchasing power parity dollars is \$1,480 per month [7], over 3 billion people live on less than \$2.50 per day, and 80% of the world's people live on less than \$10 per day [6], it is shocking that Americans spend \$250 million dollars annually to send themselves on medical mission trips that are of questionable value to anyone but themselves [8, 9].

The ethical issues that are most compelling arise around the actual provision of medical care. Multiple blog sites exist on which medical, dental, premedical, nursing, and pharmacy students discuss their experiences. The oft quoted and variably attributed statement that "the only care that they get is the care that you give them" is a concept that the students themselves often echo [10]. But, it begs the question: Does care rendered by a student actually qualify as medical care? Or more bluntly stated: Does being poor and brown mean that you do not deserve the same level of expertise and consideration for patient safety as someone who is rich and white? There is adequate literature to support the fact that "those in training may lack experience in recognizing serious or unfamiliar conditions and skills in performing particular procedures. In resource-constrained health care settings, trainees from resource-replete environments may have inflated ideas about the value of their skills and yet may be unfamiliar with syndromic approaches to patient treatment that are common in settings with limited laboratory capacity. These challenges may be

compounded by...lack of mutual understanding of training and experience, and the possibility that inexperienced or ill-equipped short-term trainees are given responsibilities beyond their capability” [11]. Further challenges to patients’ ability to receive adequate medical care are often compounded by the visiting trainee or professional healthcare provider’s inability to speak the language of the country where he has chosen to do short-term medical work or his failure to understand the culture [12]. Some American medical colleges and residency training programs propose that work abroad helps meet the Accreditation Council for Graduate Medical Education cultural competency requirements [13], and there is indeed value in exposing students and residents to cultures that are not their own as part of cultural competency training. When inadequately supervised, however, these experiences can again be far more valuable to the trainees than to the patients. Those faculty members with expertise can find opportunities to teach cultural competency to students and residents during the day-to-day, well-supervised patient encounters that are part of their home hospital training. In-country training also ensures that patient outcomes are closely monitored, as opposed to international training experiences, where 74% of missions either fail to document outcomes, or follow patients for only a few days [8].

The issue of sustainability is a major consideration in global health. The translation of skills from physicians in resource- and training-rich nations to physicians in resource- and training-poor nations is far more efficient, both monetarily and in patient access and outcomes, than medical missions conducted by physicians from resource-rich nations. Clearly, an indigenous physician can operate on more patients in a year than a visiting physician can operate on in a month. However, such skills translation is extremely work-intensive. Documented relationships leading to independent practice generally take 10 years or more [14, 15]. One of the most successful programs involves teaching renal transplantation to indigenous surgeons in northern Iraq. Dr. Gazi Zibari, an Iraqi Kurdish physician, returned to his native country in 1992 to lay the groundwork for the program. American physicians work side by side with Kurdish physicians to prepare patients, perform surgery, and manage postoperative routine and critical care [16, 17]. Preliminary analysis of the independent work of the Kurdish surgeons over a 5-year period documents renal transplant outcomes comparable to those achieved in the United States, but the program has a decade-long history of a few in-country visits a year by a stable team of physicians as well as telemedicine and phone contact as needed. The Americas Hepato-Pancreato-Biliary Association, Operation Hope, and the Kurdistan Regional Government Prime Minister Foundation have supplied consistent funding to ensure that all of the necessary resources are consistently available in the local hospital. Additionally, the program is led by a linguistically and culturally competent, resource-sensitive physician who maintains constant contact with government, military, and health ministry officials so that there are no interruptions in supplies or barriers to patient care, communication, or physician training. Perhaps most importantly, Dr. Zibari performed a needs assessment and a feasibility study prior to initiating the program. He was cognizant of the fact that much of what we in the First World seek to teach physicians and other healthcare providers in the Third World is

meaningless in the context in which they practice medicine. We all hear of programs, costly in dollars, time, and energy, designed to teach bystander cardiopulmonary resuscitation or put automated external defibrillators in public venues in nations where tuk-tuks and auto rickshaws are used to transport patients to hospitals or where the nearest hospital is 4 h away by the local transport method. Might it be more sensible to train an indigenous healthcare worker, someone who speaks the language, knows the culture, is trusted by the community, and is going to continue to live and work among them, to deliver a breech baby, or to set a fracture? Many global health professionals, this author among them, contend that this is the most cost-effective, culturally competent method of bringing sustainable health care to the majority of the world's population. In countries like Afghanistan or Bangladesh, where there are only 0.3 physicians per 1000 people, or Malawi, Niger, and Sierra Leone, where there are only 0.02, what good would it do to teach renal transplantation or defibrillation? [18]. With UNICEF estimating that 2.2 million children died last year due to lack of immunization [19], providing cheap resources and minimal training to community health workers seems an obvious cure.

One of the most devastating areas of disparities is found among the ever-expanding population of displaced persons and refugees. According to reports issued in June 2017 by the United Nations High Commission on Refugees, 65.6 million people are currently living as forcibly displaced persons, of which 22.5 million are refugees and 10 million are currently stateless people. Of these 65.6 million displaced persons, fully one half of them are under the age of 18. During the year under analysis, only 189,300 of these people had been resettled, with the remainder living in camps or ad hoc communities [20]. Individuals living in such conditions, as well maintained as some of them may be, are subject to infections that are transmitted in environments lacking modern sanitation (cholera, trachoma, schistosomiasis), infections common in crowded environments (tuberculosis, hepatitis, mononucleosis), and diseases that are caused by social stressors (domestic violence, hypertension, low birth weight and premature delivery, sexual harassment and assault, child abuse, human trafficking, prostitution).

Another area of health disparity is research. Eighty percent of the world's scientific literature is produced by only 20 countries. None of these countries is in Africa or the Middle East, and only one (Brazil) is in Latin America. One of the limiting factors is that most of the major indexes, such as Scopus (the largest abstract and citation database of peer-reviewed literature), require that articles be printed in English in order to qualify for listing [21]. The recently published English language study, "Mortality after Fluid Bolus in African Children with Severe Infection," [22] called into serious question the concept that evidence-based medicine can be universally applied to all patients when not all patients share the same resources or genetics as the study population on which the evidence was established. If every patient is to have the benefit of evidence-based practice, then all patient populations must have the opportunity to be studied and have best practices established for their race, ethnicity, culture, and resource environment.

Research is further impacted by who is doing the research. Drug companies are increasingly conducting studies in nations whose ethical review boards are less complex to negotiate than those in Western cultures. Recent studies question “whether the research being conducted is of value to public health in these countries or whether economically disadvantaged populations are being exploited for the benefit of patients in rich countries” [23]. Even non-pharmaceutical studies in Third World countries are most often conducted by Northern investigators. Witness the multiple papers published about the Haitian earthquake experience written by North American authors who traveled to Haiti to do medical mission relief work, but chose not to involve Haitian physicians as co-investigators. Perhaps part of the Fluid Expansion as Supportive Therapy (FEAST) study’s success can be attributed to the involvement of local doctors. In a presentation about their work, the investigators stressed the importance of the relationships between the local pediatric staff and the community, both in enrolling patients and in the treatment of the children during the trial. Other studies have documented that the well-established phenomenon of concordance in clinical practice also has a powerful influence in research trials [24].

More recently, the social diseases of human trafficking and orphan tourism have been on the rise. Currently, 20.9 million persons are victims of human trafficking. Each year, 2 million children are forced into sexual slavery. More than half of children trafficked for sex tourism are under the age of 12 and serve about 1,500 customers per year. Ninety percent of children rescued from Southeast Asian brothels are infected with HIV. Two-thirds of victims of child sex trafficking undergo forced abortions, often outside of safe medical environments [25]. Trafficking of girls is sometimes sanctioned by their families, who must sacrifice one child to feed the others or who feel that a female child must contribute to the family. The amelioration of global poverty and the elimination of the gender disparities that prohibit the education of females and their employment in professions and trades will serve to remove one of the root causes of trafficking. Enforcement of the international laws prohibiting trafficking and criminalization of procurement of persons for engagement in sexual activity in exchange for money will help to eliminate the other contributing factors [26].

A recent Al-Jazeera documentary highlighted the facts about the emerging orphanage tourism trade and popularized the slogan, “Children are not tourist attractions.” According to their report, two-thirds of children living in orphanages have at least one living parent but are kept out of school and employed as professional orphans. Western tourists are lured into the orphanage and asked to play with the children and to make contributions to social and educational programs to improve life for the orphans. The money is kept by the proprietor of the orphanage. Visitors can enter the children’s bedrooms at will, unsupervised, and can “check out” a child for the day to take them to a zoo, an amusement park, or for a meal. There have been numerous incidents of kidnappings and child molestations associated with these activities [27].

Conclusion

While modern health care has made remarkable advances in recent decades, not every citizen of the world can benefit from these advancements. Resource-rich nations should take care to invest money and skills in resource-poor nations in a culturally competent and resource-sensitive manner. Needs assessments, feasibility studies, impact studies, and appropriate governmental permissions and collaborations must be undertaken to ensure the success of any intervention. Local healthcare providers must be involved in the planning, execution, analysis, and publication of any endeavor that takes place in their country and involves their patients if exploitation is to be avoided. Proper supervision of trainees, protection of patient safety, and quality assurance monitoring of complications and outcome measures must be done in the field with the same rigor as it is done in the home hospital environment. Empowerment of local healthcare providers will ensure that sustainable and meaningful assistance is provided in a way that is culturally competent and resource sensitive. Visiting physicians and other providers must be aware that they are guests in the host country. They should provide for their own lodging and food so they do not use resources that could have been made available to patients. They should make every effort to learn the culture and the language of the country where they plan to visit so they can maximize their positive impact and minimize the risk of misdiagnosis or harmful interactions. Visitors must be aware of the high risk of diseases linked to poverty (abuse, trafficking, certain infectious diseases, low birth weight) that may be far more prevalent in the nations that they visit. Everywhere we go, we should be cognizant of the privilege we have as healthcare providers and be certain to honor the patients who trust us with their care. Eventually, every patient will have access to culturally competent, evidence-based, best practices for whatever medical condition presents. We can each be a link in the chain that eliminates poverty and disparity for every patient whose life we touch, regardless of color, race, religion, ethnicity, age, gender identity, or socioeconomic status.

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