First Do No Harm: Ethical Considerations of Pediatric Orthopaedic Global Outreach

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Abstract:
The purpose of this editorial is to introduce the ethical considerations surrounding pediatric orthopaedic global outreach and stimulate discussion about how to best approach this work. Bidirectional exchange with partner surgeons in low- and middle-income countries forms the foundation of successful outreach. Fostering these relationships and approaching outreach with humility and curiosity allows for a genuine needs assessment. The outreach program can then be designed to address the needs of the target community. Success should not only be defined as the number of surgeries performed but also the number of healthcare workers trained and sustainable programs created at the host site. Remember that nurses, physical therapists, and surgical technologists also desire training. Finally, it is important to understand and identify any implicit or explicit bias before pursuing global outreach as that may hinder successful outcomes and bidirectional exchange with host surgeons.

Key Concepts:
- Build relationships with partner surgeons in the region that you want to serve.
- Listen and learn from your surgeon partners and other local hosts.
- Stay humble, curious, and altruistic.
- Conduct a true needs assessment.
- Structure your outreach work to address the needs expressed by your surgeon partners and local community that empower and build local capacity.
- The host hospital and surgeons should be running the show, not you.

Introduction

Despite the significant burden that musculoskeletal conditions place on vulnerable populations, there is limited access to key resources such as surgical care in many low- and middle-income countries (LMIC).[1-3] These disparities are linked to opportunities for physicians from higher income countries to participate in global outreach. Supporting orthopaedic surgical care[4-6] and education[7,8] has been found to be cost effective in countries with limited resources. Within the Pediatric Orthopaedic Society of North American (POSNA), members have expressed great interest in becoming involved in humanitarian efforts. While there is enthusiasm for participation, there is also a growing awareness of the potential ethical pitfalls. As early career




Gurus (left to right):

Merrill Chaus, RN, BSM, MPH[1]; John E. Herzenberg, MD[2]; Miguel Oqueli, MD[3]; Coleen S. Sabatini, MD, MPH[4]

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surgeons, the authors were motivated to further understand the ethical considerations surrounding global outreach. The goal of this paper is to review literature related to global outreach in orthopaedic surgery and complement this data with input from thought leaders in pediatric orthopaedic global outreach.

The Great Debate: Short vs. Long-Term Global Outreach

Regardless of the altruism present when deciding to volunteer overseas, there is debate regarding the merits of various volunteer models. Some would argue that you can only participate in impactful global outreach and build relationships with host country surgeons and patients if you stay for an extended time. However, short-term global outreach efforts have their place and not all short-term experiences can be labeled as bad. What must be avoided is medical tourism, defined as "participation in an international clinical health experience in a resource-poor destination by a trainee from a high-income country (HIC) where the net gain favors the trainee participant and insufficient consideration is given to the needs of the host country."[9] Medical tourism can be prevented by ensuring selection of more experienced volunteers to provide care and supervise trainees, establishing clear goals before departure in conjunction with the host team, and adequately educating the volunteer medical team.[10] Ultimately, the goals of the visiting team should be based on the priorities of the host team. Dr. Miguel Oqueli, a pediatric orthopaedic surgeon in San Salvador, first met Dr. Dennis DeVito, a pediatric orthopedic surgeon from Atlanta specializing in spine surgery, in 1996. Together they have built an ongoing program to deliver pediatric spine care in El Salvador; but as Dr. Oqueli recalls, this relationship started with a bidirectional partnership first.

Guru says:

Around two-thirds of the world's children lack access to timely, safe surgical care. We need to think bigger-picture with sustainable solutions. That starts with education and capacity building for all staff involved in surgical care, and includes program development, research, government accountability, and buy-in.

—Coleen Sabatini, MD, MPH

Guru says:

What helped most from my point of view, was a commitment feeling that grew on both sides, host and visitors, because we as hosts could see a big need we didn't see before and the willingness to help from the visitors, so this helped us to build a strong partnership.

—Miguel Oqueli, MD

The authors submit that additional principles should be considered when pediatric orthopaedic surgeons from HICs perform short-term global outreach in LMICs. First, the outreach should begin with a needs assessment in conjunction with the host hospital, including partner surgeons, staff, and hospital administration. Second, the effort should build the host surgeon's repertoire and reputation. A visiting team should instill patient confidence in the host surgeon and should not detract from the host surgeon's practice. Third, the visiting surgeon and their team should focus on building the capacity of the host hospital. A visit is not done in isolation, rather it should be one piece of an overall plan to enhance the host hospital's processes and access to resources such as surgical implants and supplies. Fourth, the visiting surgeon should provide care and/or knowledge that patients would otherwise not have access to if the visit hadn't occurred. If the host surgeon expresses a need for a visiting hand surgeon, the trip should not be focused on unrelated pathology in the foot, ankle, or hip, for example. Finally, every effort should be made to provide care that can be continued after the visiting team leaves.

Guru says:

Commitment to a local site is key in order to build relationships and gain the trust of the local community. Going to a different country every year may be more "sexy," but it is unlikely to be as impactful and effective as going to the same place every year for many years.

—John Herzenberg, MD

Leave Skills and Not Scars?

For many pediatric orthopaedic surgeons planning to volunteer overseas, the goal of their visit may seem self-explanatory: to help as many children as possible by doing as many surgeries as possible. While there is nothing inherently wrong with performing surgery, there are many considerations to be addressed. A well-known pediatric orthopaedic surgeon, Dr. Kaye Wilkins, is known to advise that surgeons should "Leave Skills and Not Scars" when they volunteer overseas. The concept is that by teaching the host surgeons through lectures and surgical demonstrations on how to provide care for children with musculoskeletal disorders, you can empower surgeons to care for their own patient population without your presence. However, orthopaedic residents in the U.S. don't just learn skills from their attendings by hearing lectures but also by observing their attendings do a surgical procedure or even being observed performing that procedure themselves. In the same vein, the local surgical community can benefit from the same type of hands-on teaching. By combining both didactic and hands-on teaching experiences, a true exchange of skills can occur.

Guru says:

At the heart of all our work should be the goal of being allies to our colleagues around the world and helping them gain the skills and resources they need to do their jobs without the need for ongoing involvement of outside surgeons—a self-sufficient and a thriving locally run program that provides safe, accessible, quality care to children should be the goal.

—Coleen Sabatini, MD, MPH

In addition, as pediatric orthopaedic surgeons, it is easy to focus on the host country surgeons when it comes to training and education. However, the patient will be cared for by a diverse team of healthcare professionals including surgical technologists, surgical nurses, inpatient nurses, physical therapists, etc. High-quality

Guru says:

There is a concept of "leaving skills not scars" when participating in global outreach work. I believe the appropriate quote should be, "leave skills AND scars," as this results in a more complete learning experience for all parties involved.

—John Herzenberg, MD

global outreach involves much more than teaching a surgeon how to cut but also setting aside time to facilitate an educational exchange with nurses and other hospital staff on best practices in the perioperative setting. Therefore, it is important to bring a team including skilled members in nursing, therapy, and other important nonsurgeon roles who can best support this education.

Informed Consent and Ethical Patient Care

The first step of ethical patient care in global outreach missions involves informed consent. This can be challenging in some countries that have not transitioned to a shared decision-making process between the surgeon and patient when discussing surgery.[11] Therefore, the patient might tend to go along with whatever the surgeon suggests, particularly if that surgeon is from a HIC. These considerations make it even more vital for visiting surgeons to spend time explaining to patients and their families the benefits and risks of proceeding with the surgery. Obviously, the host surgeons should also play a central role in the informed consent process to build trust and navigate the local culture and expectations.

Guru says:

A common trap when first going overseas is to do as many surgical cases as possible so that you can report how successful the trip was to the donors supporting your trip. However, we have realized the error in this method, and instead we focus on reporting how many people we were able to educate.

—Merrill Chaus, RN, BSN, MPH

Another often overlooked ethical issue is that frequently, visiting surgeons do not wear clear name tags identifying who they are and what country they are from. The patients deserve to know who will be providing care and it is up to the surgeon to make sure the patient is fully informed about who their treating surgeons will be.

Other ethical issues encountered include a push from host surgeons to perform the most complex techniques such as vertebral column osteotomies of the spine, Van Ness rotationplasties, or large sarcoma resections. While these techniques may be within your skill set, it still may not be safe for the patient in the local setting. The Foundation of Orthopedics and Complex Spine (FOCOS) Hospital in Ghana is a prime example of how to safely develop a long-term global outreach effort that specializes in performing complex spine procedures.[12]

Guru says:

Don't forget that it's not only the local surgeons who take care of the patients. The nurses are often frequently involved in patient care, yet these nurses are often ignored by the visiting surgeons with regards to providing education to improve the patient's care. When we go on overseas trips, we make a point to bring nurse educators that specifically work with the nurses to make sure that the patient's postoperative course will be optimized.

—Merrill Chaus, RN, BSN, MPH

However, the FOCOS Hospital is unique and has not been replicated to date. For visiting surgeons, sometimes the correct ethical decision may involve choosing a less aggressive intervention in order to attain a more predictable and safer outcome.[10] Less complex operative management plans shared with the host surgical team may be more likely to be implemented after the visiting team departs.[13] Stay within your skill set. Just because you are presented with a tough case, it doesn't mean you have to do that case.

Finally, with regards to ethical situations, it is important to remember to leave your selfie stick at home. Don't do anything in a host country that you wouldn't do at home. You wouldn't think of taking an identifiable picture of a patient and then posting it on social media in your HIC. So, if you are going to take photos, make sure the child's face is not visible and consider having the patient's parent sign a media consent. However, realize that signing a consent may not even be part of the local custom of the hospital in the LMIC, so a parent may not fully understand what they are signing. Also, understand that even if the patient's parent says it's okay to take a picture or video, it may not really be okay, but permission is given due to deference given to the surgeons visiting from HICs.

Guru says:

It is so easy to marginalize the local workers because we can be so much quicker sometimes without them by using our own scrub techs and residents to get the case done. But it is better to spend the extra time, using the local talent for cases, so that there can be a better exchange of skills

—John Herzenberg, MD

The Surgeon Without Complications Is the Surgeon With No Follow-Up

A consistent challenge in outreach work is how to ensure that patients have appropriate follow-up care. Local providers are the key. Honestly, they are the focal point of any successful effort. Building trust and mutual respect with the host surgeons is essential. Investing in their advancement, capacity, and education is foundational. Supporting local capacity building facilitates good follow-up care. Consider how patient care is documented to support ongoing care.[11] Is there already a medical records system in place? If so, are your notes included in the local system? How will needed braces, therapy, or medications be provided? Can virtual consults be utilized when you are away? Determine availability for in-person return trips and schedule annually or more frequently if possible and as desired by the host surgeons/hospital administration.

Guru says:

Make sure that the name tags are bilingual to help the patient better understand who is treating them.

—John Herzenberg, MD

Guru says:

I recommend that every informed consent discussion should be done with two interpreters. One to translate for the patient and the surgeon and the other to act as a scribe, writing down the details of the patient interaction in a progress note. This setup ensures high-quality documentation without the interpreter's attention being split during the informed consent process.

— John Herzenberg, MD

Guru says:

If you are doing service trips, each time you go, you should see the patients that you have operated on in the past for follow-up to see how they are doing, if the surgery was helpful, how they are coping, if they have the equipment and therapy they need.

—Coleen Sabatini, MD, MPH

Complications are an unfortunate reality in surgical care. Careful planning can reduce risk, but despite our best efforts, complications still occur. Some complications, such as superficial wound infections, can be easily treated as long as they are identified and appropriate resources are available.[11] Other complications, such as paralysis after spinal fusion, or a limb with a vascular injury are devastating in any circumstance, particularly if there is no access to rehabilitation or prosthetics. Critically evaluating complications together with partner surgeons in a morbidity and mortality assessment and root cause analysis is a useful tool for both improving quality of care and bidirectional education. In this age of

modern technology, much of this follow-up and coordination of complications with host surgeons can be done over email, video chat, or even encrypted chat networks like WhatsApp.

Remember That You Are a Visitor

While individual motivation to participate in global outreach work varies, most surgeons report altruistic goals of wanting to help children with limited access to pediatric orthopaedic surgical care, dedication to education, and interest in improving quality of care.

Guru says:

The first time you go anyplace, listen and learn first, don't just jump in and do surgery. Understand what resources they have, what they need, and the societal context of orthopaedic conditions in their communities.

—Coleen Sabatini, MD, MPH

Some may state a desire to learn about conditions encountered more frequently in LMICs.[14] Despite the best of intentions, we must be aware that unintended outcomes may occur. Being cognizant of potential pitfalls is the first step to avoiding them. Good guests are, of course, respectful, compassionate, and follow local rules and licensing requirements.[15]

Guru says:

Investigate about experiences from other places with similar conditions that can be applied to your environment.

—Miguel Oqueli, MD

Our unconscious biases, lack of cultural understanding, limited knowledge of local resources, and assumption of superiority of our own training may inhibit the success of our intended outreach work if not recognized and addressed. Starting with humility and genuine interest in learning about the region and people you desire to help lays the foundation for a true needs assessment. Ask your host country colleagues what they perceive to be their greatest needs. This can be done in individual conversations as well as surveys and even audience response tools at educational meetings.[16] Building relationships with partner surgeons in the country where you plan to do outreach work is the key to developing thriving bidirectional partnerships with exchange of ideas to facilitate learning by all parties and continuing to build capacity for local delivery of excellent patient care.[11,15]

Guru says:

Cultural Competency is an oxymoron—it really is Cultural Humility as you can never be truly competent in another person's culture. But you can be humble as you try to understand the culture of the local community.

—Merrill Chaus, RN, BSN, MPH

The Dark Side of Doing Good

Visiting teams may unintentionally consume limited resources needed by local providers such as OR time, anesthesia providers, OR staff, instruments, sterile supplies, sterile processing, fluoroscopy, oxygen, electricity, gas for generators, inpatient beds, nursing care, antibiotics, pain medications, etc. Excess waste from single-use items brought by the visiting team requires disposal which also consumes resources.[19] In addition, staff from the host hospital may work extra hours leading up to and following a surgical team's visit in order to take care of other patients whose surgeries were adjusted to accommodate the visit. Unless you ask, the host team may not mention that the OR and anesthesia staff volunteered to work on the weekend to support the visiting team.[17] Staff may have to spend their own

Guru says:

Tips for building a true bidirectional partnership: honesty, respect, friendship. Once you get the first two, you can build a true friendship that can become a brotherhood.

—Miguel Oqueli, MD

Guru says:

Visiting teams from HICs can do more harm than simply leaving complications from their surgeries. There can be a dark side to doing good during global outreach efforts with negative effects on the host hospital, surgeons, healthcare workers, and community.

—Merrill Chaus, RN, BSN, MPH

money for taxis to get home if working with the visiting team later than the local buses run. Visiting teams may consider bringing their own personnel including nurses, surgical technicians, neuromonitoring technicians, and sterile processing technicians to be less of a burden on the host institution's resources; however, this is a double-edged sword because involvement of the host hospital's staff is essential to the sustainability of an ethical program.[15] Techniques such as field sterility with wide awake local anesthesia no tourniquet (WALANT) are less costly than utilizing a full sterility OR with general anesthesia for hand procedures[10] and may be an option to help conserve resources in certain types of procedures. Open communication and planning between hosts and visitors regarding available resources[10,17] and a local point of contact at the host institution to organize resources[11] are critical.

Guru says:

Once we know when a surgical campaign is going to be held, we coordinate with the other areas that can be affected, to reschedule those activities. Fortunately, this has been well tolerated and handled, so this lets us have a low impact affecting other areas.

—Miguel Oqueli, MD

Visiting operative teams may displace host surgeons from the operating room, taking away their earning potential for the duration of the visit. Another potential unintended effect of outreach efforts is the risk of undermining community trust in their own surgeons. It may be that the community has surgeons with the expertise to perform a certain procedure, but the patient is unable to afford the implants, and the hospital won't allow the case to proceed without payment. In this case, surgeons from HICs may best be able to help by providing resources for implants rather than operating on that patient, thus implying that the host surgeons do not have the skills to take care of the people in their community. Speaking highly of your host partner surgeons, especially during joint patient encounters and when advocating with the host institution and local government, can reinforce respect for their abilities and appreciation for their role in providing care in the community. Including partner surgeons in leadership roles in the visiting organization not only recognizes their expertise but allows the local perspective to be fully considered when making decisions regarding planned outreach.

Guru says:

Try your best not to undermine the local economy as many local doctors can do lots of cases. In that case, it may be better to operate on the indigent population which isn't taking away from the paying patients of local doctors.

—John Herzenberg, MD

Abolishing the Savior Complex: Addressing Racism in Global Outreach

"When the missionaries came to Africa, they had the Bible and we had the land. They said, "Let us pray." We closed our eyes. When we opened them, we had the Bible and they had the land." This quote, from Desmond Tutu, an anti-apartheid and human rights activist, uniquely summarizes the history of global outreach from HICs to LMICs. It is impossible to discuss global outreach without addressing the perception of mostly white surgeons and healthcare workers from HICs that they possess the knowledge and have come to LMICs to save the host patients from host surgeons. While visiting

Guru says:

Advocacy to local and national governments is important since so many of the challenges faced by our LMIC colleagues are resource and infrastructure related.

—Coleen Sabatini, MD, MPH

surgeons from HICs cannot change history, they can do their best to be cognizant of how this painful history may affect their global outreach efforts in the present. Potential biases that may impact global outreach include assuming that you are there to teach and not to learn, that you have superior western training, or that your intelligence and work ethic make you deserving of the resources and privilege that you have. Awareness of unconscious bias and strategies to combat it are being included in many orthopaedic departments across the United States, particularly in efforts related to resident and faculty selection, and improving diversity and inclusion across our specialty. Bias and racism have the potential to negatively impact outreach efforts if not actively confronted. Surveys of Ugandan healthcare providers regarding overseas surgical volunteers noted concerns regarding racial stereotypes, as well as barriers involving language and cultural norms.[18] At a minimum, bias training should be considered as part of pre-trip planning and ongoing team development. Getting to know colleagues with different backgrounds and experiences and building friendships with surgeons who don't look like you may be the most impactful to begin breaking down barriers. Approaching uncomfortable topics with humble curiosity can allow for productive conversations not only about race and bias but also enhance understanding of the region and people you are hoping to help with your outreach work. If we view our surgeon partners as true peers, like we do each other within POSNA, then respect, bidirectional learning, and desire to find out about our partner's needs and how to best meet those needs will naturally flow from that relationship.

Guru says:

What I have observed is that the ones who are [making unintended errors in global outreach] have not taken into account other people's experiences, so this leads you to make a cascade of errors in the developing of different programs you can start.

—Miguel Oqueli, MD

Guru says:

I think that too often there is a failure to recognize the intelligence, skill, and experience of our colleagues from around the globe. Surgeons in resource-limited areas have a lot to teach us about providing effective and safe surgical care with a lot less equipment and support. They have to utilize creativity and ingenuity in ways that we don't. Any international work should come from a place of mutual respect, collegiality, and a desire for all parties to learn from each other.

—Coleen Sabatini, MD, MPH

Visiting surgeons often report that they learned more than they taught when volunteering overseas. We can learn much from our LMIC colleagues regarding conditions uncommon in HICs such as gluteal fibrosis, chronic osteomyelitis, walking-age clubfoot, and delayed presentations to care. Partner surgeons' ingenuity, creativity, and resourcefulness can be an inspiration for our own practices. Limited ability to travel during the COVID-19 pandemic has led to the development and improvement of many virtual conferencing platforms that could be leveraged in continuing educational exchange between surgeons and institutions in between in-person visits.[14] Shared curiosity can lead

Guru says:

Always think … this is teamwork.

—Miguel Oqueli, MD

to research collaboration that benefits both parties. Research opportunities allow surgeon partners from LMIC to share knowledge and for the world to recognize their contributions.

Conclusion

The global need for children's orthopaedic care is significant, providing many opportunities for outreach efforts. Thoughtful consideration of the desired impacts and avoiding unintended harms will improve the success of these endeavors. Relationships built on trust and mutual respect are essential to developing ethical outreach programs. Sustainable care is possible through capacity building and resource support.

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