International Orthopedic Volunteerism: Considerations for a Successful Mission

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Since the beginning of modern medicine, orthopedic surgeons and many other skilled clinicians have endeavored to donate their time, energy, and knowledge to provide care to indigent people in distant and foreign regions around the world. Recent natural disasters have expanded the interest in and opportunity for international volunteer work within the field of orthopedic surgery. One such event that has led to more frequent international orthopedic mission travel was the devastating Haitian earthquake of 2010. It claimed nearly 250,000 lives and left many more individuals displaced and with debilitating injuries.[1] Almost a decade later, the effects of this humanitarian crisis can still be felt by many in Haiti and its surrounding territory.

Volunteers who responded to the Haitian earthquake and those who offer aid on medical mission trips around the globe provide an invaluable service to communities with great need. This mission experience often leaves the volunteers with deep positive impressions that can last a lifetime. However, to ensure a safe and successful trip for all involved, several important factors should be carefully considered prior to participating in or leading an international medical mission.

The first consideration should always be the safety and security of the volunteers. In 2010, after the 7.0 magnitude earthquake that leveled many structures around the Haitian capital city of Port-au-Prince, many volunteers came from several countries around the world to aid those affected. After witnessing numerous images in the news media of great suffering and devastation, some volunteers felt compelled to travel alone or via unsafe means within Haiti, despite the real and palpable dangers that were present during the early days and weeks following the earthquake. Regardless of how well intentioned the volunteer, like most scenarios in medicine, the risks vs the benefits need to be carefully assessed during mass causality situations or when planning mission travel to areas with imminent threats to safety and security.

Preparation for travel should involve vetting the sponsoring organization, including reaching out to previous or current volunteers or contacting group leaders to discuss the specific nature of the mission. Risk assessment should include not only the threat of criminal activity and violence, but also the risk for transmission of endemic diseases such as malaria, dengue fever, yellow fever, Ebola, and Zika virus.

Safe housing with sanitary conditions should be secured. Generally, the sponsoring organization should have deep ties within the particular community to ensure that volunteers remain safe. Throughout the world, many regions that volunteers travel to are impoverished, and some are riddled with crime, drug trafficking, gang violence, and terrorism. Thus, not traveling alone, especially at night, and traveling with local guides who are familiar with the particular community will help keep volunteers as safe as possible. Additionally, prior consultation with a travel medicine clinic to assess any need for antibiotic prophylaxis or vaccination is highly recommended.

The local resources and the ability for care to be provided long after the volunteer team has left the community must be evaluated. It is especially important that orthopedic surgeons perform a thorough assessment of surgical risk vs benefit to

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avoid unnecessary harm to the people they intend to serve. It is natural for surgeons who are new to international mission work to be enthusiastic and eager to use their surgical skills and talents. However, it is vitally important to understand that the local standard of care may often be very different from the typical standard of care within the United States.

Many international hospitals that provide charity care for impoverished people may not have the additional resources necessary to provide care for a complication following treatment. Moreover, indications to surgically treat specific injuries and conditions, or alternatively reasons to avoid treatment, can sometimes be different from what volunteer surgeons may be used to, especially when relying on their experience at home. A common clinical scenario is that of a healed long bone fracture malunion, which would typically be considered for osteotomy correction within the United States. However, in some cases, it may be best to treat this injury conservatively to avoid the risk of complications that the local community may not be able to adequately treat. For example, a regional foreign hospital that hosts mission trips may not be able to supply the weeks to months of antibiotic treatment necessary for a surgical infection or may not have local surgeons and clinicians who are readily available or even willing to address complex postoperative infections, including osteomyelitis. Complications that occur in areas where international mission work is performed may lead to a significantly higher risk of subsequent morbidity, including potential loss of limb or life.[2] Thus, in many cases, avoiding surgery and understanding when not to treat based on the lack of local resources or adequate follow-up can be just as important as, or even more important than, actually offering surgery.

Another important consideration is the need for active participation and engagement with local surgeons and other local health care team members. The volunteer and the native health care provider can learn a great deal from one another. Many native surgeons have learned to treat challenging injuries with limited resources. Thus, they have often acquired helpful techniques and methods to facilitate surgical care that the volunteer may not have considered. This exchange of information and transference of knowledge can help volunteers during their time internationally, and it may also benefit them in their permanent orthopedic practice. Moreover, this type of open communication and willingness to both teach and learn often promotes a collaborative partnership between native and volunteer physicians that helps develop a greater continuity of care for the patients long after the volunteer physician has returned home. Further, in this way, volunteer surgeons' efforts are maximized for the benefit of the particular community they aim to serve.

In conclusion, international medical mission trips, including those that sponsor opportunities for volunteer orthopedic surgery, have become numerous in recent years. Donating one's talent and skill set in these circumstances typically turns out to be a positive experience with lifelong memories. The cultural experience and perspective from international mission work can contribute to significant growth, both personally and professionally. Consequently, international volunteerism has become more of a focus early during medical school and residency training.

However, to facilitate the best overall experience and to maximize the benefit, several factors must always be carefully considered prior to any international medical mission. First, the safety and security of the entire team is paramount. Next, adapting to local standards of care and understanding local resource limitations is key to avoiding unnecessary morbidity and postoperative complications. Finally, early engagement with native surgeons and health care team members prior to and during travel will help promote important regional relationships that endure long after the medical mission trip is over. Learning from local surgeons and maintaining open, active lines of communication will increase the likelihood that any return travel to the community continues to be a rewarding experience. Most importantly, it will also ensure that the best possible care is provided to the patients, who are the primary benefactors of international orthopedic volunteerism.

References

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