

Reconstructive Facial Plastic Surgery on Humanitarian Mission Trips: Role of the Resident Surgeon Team Member

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Abstract

Despite the good-natured intent of the volunteers that embark on humanitarian mission trips, the intent of the missions trips have at times been criticized for being training grounds for young physicians and surgeons. This commentary describes the role of the resident surgeon on mission trips from the perspective of a current otolaryngology resident surgeon. With clearly defined roles and responsibilities, surgical care can be delivered safely with resident participation on mission trips.

Introduction

Medical and surgical humanitarian mission trips are a way physicians, medical students, nurses and support staff can join together as a team, and donate their time and skills to serve those with limited access to health care. Despite the good-natured intent of the volunteers that embark on humanitarian mission trips, the intent of the missions trips have at times been criticized for being training grounds for young physicians and surgeons [1,2]. This, in turn has been documented to be a potential source of apprehension among local physicians. For instance, one review of short term mission trips papers published over a 25-year period revealed that local doctors felt resentment that a trainee surgeon might not be as adequately supervised as in their home country [3]. There was also a feeling that inadequate supervision may lead to complications.

While formal international rotations within United States surgical residency programs are established at certain institutions, [4] residents may also find opportunities and travel with third party humanitarian groups. Resident regulations set forth by the Accreditation Council for Graduate Medical Education (ACGME) and American Osteopathic Association (AOA) for training programs in the United States might not necessarily apply to humanitarian service abroad. As a result, the role of the resident physician team member on humanitarian mission trips is not well defined in protocols. The training and supervision relationship between residents and attending surgeons must continue during overseas work. In a discussion about global surgery as a component of surgical education training, Leow, Kingham, Casey and Kushner insist that a qualified surgeon always

be available to “supervise any treatment attempted to prevent any inappropriate harm to patients” [4]. This sentiment has been echoed in guideline reports produced by Board of the American Society of Plastic Surgeons and the Plastic Surgery Foundation [5]. By sharing personal experience, this commentary aims to clarify the role of the resident mission team member, from the perspective of a current otolaryngology resident surgeon who recently completed his first mission trip.

Discussion

During formal otolaryngology residency training, the author participated in a week-long humanitarian mission trip to Antigua, Guatemala. The author travelled with a third party humanitarian mission group in order to contribute as a volunteer resident surgeon. The trip was dedicated to microtia repair, and cleft lip and palate repair. Beginning with early morning rounds, the resident was responsible for assisting the attending surgeons. Supplies were gathered and brought to the bedside, including dressings, extra drains, tape, and scissors. Patients were evaluated in unison with attending physicians, drains and dressings were changed, and the daily plan for each patient was determined at this time. The team then moved to the pre-operative area where evaluations were conducted, the surgical site was marked, and any remaining pre-operative questions were answered.

The involvement of the resident during each case closely resembled the operating room experience in the United States. The resident mostly participated as an assistant to the primary surgeon. Since there were several rooms operating at once, the resident often shuffled between rooms when needed for

Table 1: Resident Objectives, Responsibilities and Participation Roles Through Phases of Care.

	Pre-Operative	Operative ^(c)	Post-Operative
Clinical	Examine patients during pre-operative evaluations	Assist in every operation	Evaluate patients on morning rounds ^(d)
	Assist in determining candidacy for surgery	Harvest skin graft material (skin, costal cartilage, temporal parietal fascia, etc.)	Document operative reports and progress notes
		Suture closures	Follow patients through PACU area and into recovery wards
			Round on all patients before leaving for the evening
Logistical	Communicate plans with patients and families ^(a)	Maintain flexibility to transfer rooms when needed elsewhere	Coordinate morning rounds with attending surgeon
	Organize and stock operative supplies		Communicate plans with patients and families ^(a)
			Coordinate post-mission clinical evaluations
			Organize and remove unused supplies at end of mission
Clerical	Take pre-operative photographic images	Participate in "Time-Outs"	Organize operative records in central location or database
	Measure and document indices ^(b)		Participate in after hours team bonding events (receptions, dinners, etc.)
	Assist drawing templates for auricular reconstruction		
	^(a) Fluency in foreign language is useful; ^(b) Microtia measurements included measurements of auricle, projection of helix, intra-auricular measurements, etc; ^(c) Under the direction and supervision of attending surgeon or chief surgeon; ^(d) Dressing changes, drain changes, overnight events, formulate plan, communicate with attending surgeons		

certain tasks such as harvesting skin grafts. There was adequate supervision from attending surgeons at all times during the case. Post-operatively, the resident rounded on all patients on the wards before leaving for the evening.

A potential method of lessening the resentment and apprehension of having trainees on mission trips might be to establish guidelines for international humanitarian trips, outlining the role of the resident team member. For instance, guidelines for the delivery of plastic surgery care were created and approved by both the American Society of Plastic Surgeons and the Society of Pediatric Anesthesia [5,6]. These reports include general comments about resident participation. More specific roles and responsibilities of the residents through the phases of care on facial plastic surgery mission trips are presented here (Table 1). This basic information could be custom-tailored to the individual mission trip in order to describe the resident team member's exact role and could be provided to the facility in the host country to provide full disclosure and transparency.

The future for resident involvement in mission trips looks bright. Dr. Mary Ann Hopkins, in her presidential address for Association for Surgical Education, described the importance of resident participation in global health initiatives, stating that the experience "not only imparts the importance of global health but will also show them (the residents) the value of education

and training local doctors" [7]. Residents have been shown to perceive benefits in "cultural competency, communication skills, adaptability and desire for service" [8]. In fact, recent studies have shown that resident participation in mission trips is more likely to lead to participation in trips after residency [9]. Organizations such as "Operation Giving Back", sponsored by the American College of Surgeons, have provided a portal for which physicians and surgeons, including residents and medical students can find opportunities to perform humanitarian work [10].

Conclusion

Humanitarian mission trips can be life changing, not only for the children and their families in the countries that are served, but for the team members on the mission. A mission trip experience can help reaffirm one's passion for medicine, and serve as a reminder that providing support to those with limited access is a critical component to being a doctor. With clearly defined roles and responsibilities, the resident may function as an integral team member and should be considered as an asset, and not a liability.

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