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Volume 4 | Issue 1 Article 8

2024

# Medical Missions, Ethical Considerations and the Future for Healthcare Delivery in Ophthalmology

Robert Medina, BA
*Thomas Jefferson University*

# Medical Missions, Ethical Considerations and the Future for Healthcare Delivery in Ophthalmology

By Robert Medina, BA | Faculty Reviewer: John Anhalt, MD

Beginning hundreds of years ago, priests from Europe embarked on 'medical missions' with the goals of delivering care to the body, mind, and soul. Hundreds of years later, members of the United States healthcare system set out on humanitarian medical missions to provide medical assistance to communities in developing countries.[1] The concept of providing care internationally as a product of global social responsibility has become engrained in the United States healthcare system, and is popular among providers, trainees, and pre-medical students. In 2023, 21.8% (n = 3264) of matriculating medical students reported participating in international volunteer work, while 7.0% (n = 753) of students who elected to take at least one gap year between college and medical school volunteered internationally.[2,3]

International medical volunteering (IMV) greatly benefits communities in need through the provision of free, quality medical care and resources. However, complications may arise if those who participate in IMV do so for personal gain or if care is provided without consideration of a community's existing healthcare resources. The pitfalls of IMV are often seen if care is delivered over a short period of time and when providers choose treatment modalities requiring frequent follow-up in areas where adequate infrastructure does not exist to support this follow-up care. Additionally, problems occur when limited contact is made with local healthcare providers, prior to volunteers' arrival.[5] Additionally, because these opportunities exist in the healthcare space where trainees and pre-medical students look to bolster their applications with clinical volunteering, it is crucial that those who engage in IMV have a true interest and strong commitment to helping promote the welfare of these communities, as the alternative poses real danger to the humanitarian nature of volunteering in these communities.[2,6] Therefore, it is crucial that IMV is conducted with attention to cultural competence, knowledge of pre-existing community resources, and appropriate anticipation of and plan for the provision of follow-up care.

Within the field of ophthalmology exist myriad ophthalmic medical missions for medical students, trainees, and physicians. Notably, they are shifting away from short-term solutions and seek to establish long-term international healthcare programs that prioritize humanitarianism, education, and training. [7-12] After listening

to various stakeholders in an effort to identify the most meaningful avenues for effecting change, the Lancet Global Health Commission on Global Eye Health described the need to deliver high-quality, low-cost comprehensive eye-related services, including prevention and treatment of ophthalmic disease, as well as rehabilitation following care.[13,14] These goals for establishing comprehensive international care have been echoed by providers seeking to improve and restructure IMV programs across medical specialties in a recent global survey.[15]

***Figure 1:*** Dr. John Anhalt joining the Aravind Eye Hospital team from Madurai, India on a community outreach camp.

Although a shift from short-term holiday missions towards longer lasting healthcare delivery models has ensued, work is needed to increase the ability of services that are being provided and decrease incidence of preventable vision loss. Thus far, programs have focused on providing care that is compatible with each community's existing resources while also training local healthcare providers in routine management and follow-up care. Research shows that efforts to combat preventable vision loss secondary to diabetes and vitamin A deficiency—the most common cause of preventable childhood vision loss in developing countries—through education have proved successful.[16] As programs expand their work to address more forms of eye disease, it is imperative that research be conducted to assess the efficacy and outcomes of various training modalities of local physicians, as well as the procurement, management, and delivery of eye health equipment for treatment of various diseases in developing countries.

As the attitudinal shift changes from a mission approach to an integrative approach, we are also seeing a shift towards a communal learning and engagement model where Western volunteers also learn from communities they visit. For example, there is much to be learned from countries who have eliminated Trachoma as a public health problem, such as Cambodia, Ghana, and Nepal, as well as care models such as the LV Prasad Eye Institute in Hyderabad, India which provides care to all members of the community irrespective of their ability to pay for services.[17, 18] The first level of this five-tier healthcare model utilizes

community volunteers termed Vision Guardians who monitor the general state of eye-health in their communities. The second level of care is comprised of Vision Centers, staffed by trained community members who conduct primary eye screenings and refer to providers at Secondary Eye Centers who diagnose and treat all eye conditions, and provide surgical interventions for common eye disorders. Above Secondary Centers are the Tertiary Centers and the Center of Excellence, whose physicians specialize in treatment of complex ocular disease. Overall, this care system services a population of 50 million people across thousands of communities.[18]


***Figure 2***: Dr. John Anhalt, during his Wills Eye Global fellowship, traveled to Zambia and Nigeria to collaborate with local physicians late in 2019.

These innovations offer a unique look at other healthcare models, prompting us to assess the cost and efficacy of the United States healthcare system and highlighting the importance of the ongoing shift from traditional medical missions to integrative international medical volunteerism with reciprocal learning opportunities.

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