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Global health has evolved to focus on reducing health inequity and obtaining the highest attainable standard of health for all people. To do this, a range of actors now pursue interventions and policy with an eye toward global targets that place strong emphasis on improving health systems. Within global health, global surgery has sought to delineate the burden of surgical disease and propose policy to improve access to surgery. Oral and maxillofacial surgery has been underrepresented in global health but has a vital role in reducing the global health inequity attributable to the impact of oral and craniofacial conditions.

<b>Oral and Maxillofacial Surgery in Low-Income and Middle-Income Countries</b>	<b>355</b>
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Five billion people worldwide do not have access to safe, affordable surgical and anesthesia care. The burden of inadequate access to safe and affordable surgical care falls heaviest on individuals living in low-income and middle-income countries (LMIC), where 9 out of 10 people do not have access to basic surgical care. Global oral and maxillofacial surgical care is included in the global burden of surgical disease, and increased awareness of the need for global oral and maxillofacial surgery (OMS), with the initiation, support, and funding of research on the need to develop a global OMS capacity-building strategy is imperative.

<b>Global Burden of Head and Neck Cancer</b>	<b>367</b>
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Head and neck cancer is increasing globally owing to rising rates of tobacco use and human papillomavirus infection. Today, cancer is the leading cause of death and disabilities in developed countries and the second leading cause of death in countries with developing economies. Understanding the global landscape of head and neck cancer will empower oral and maxillofacial surgeons to play a critical role among patients and societal education regarding the importance of addressing modifiable risk factors and continuing to play an important role in the diagnosis and management of head and neck cancer.

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- View from the Other Side: A Perspective on Oral and Maxillofacial Surgery in a Developing Nation - Bangladesh** 377  
Motiur Rahman Molla, Hussein K. Haji, and Nafisa Marium Molla
- Since the introduction of oral and maxillofacial surgery in Southeast Asia, the field has expanded considerably in the region, with existing oral and maxillofacial surgeons performing a multitude of complex surgical procedures, ranging from orthognathic surgical procedures to oncological resection and reconstruction cases. Oral and maxillofacial surgery continues, however, to have considerable potential for growth in Southeast Asia. To accomplish this growth, assistance from the global oral surgery community has proved and continues to prove invaluable and essential.
- Diversity and Cultural Competency in Oral and Maxillofacial Surgery** 389  
Jessica S. Lee and Shahid R. Aziz
- Health disparities in the United States have been well documented over the past several decades and continue to affect the American population. As the world becomes more diverse, it is imperative that the health care professional workforce is trained to care for the diversifying patient population, striving to improve health disparities in the United States and worldwide. Improving the diversity within the health care professional workforce likely will aid in emphasizing the importance of cultural competency of health care professionals, with the development of programs aimed at cultural competency training and assessment.
- Travel/Tropical Medicine and Pandemic Considerations for the Global Surgeon** 407  
Christian Sandrock and Shahid R. Aziz
- International travel goes hand in hand with medical delivery to underserved communities. The global health care worker can be exposed to a wide range of infectious diseases during their global experiences. A pretravel risk assessment visit and all appropriate vaccinations and education must be performed. Universal practices of water safety, food safety, and insect avoidance will prevent most travel-related infections and complications. Region-specific vaccinations will further reduce illness risk. An understanding of common travel-related illness signs and symptoms is helpful. Emerging pathogens that can cause a pandemic should be understood to avoid health care worker infection and spread.
- Global Anesthesia in Oral and Maxillofacial Surgery** 427  
Evonne Greenidge, Michael Krieves, and Rene Solorzano
- Anesthesia for oral and maxillofacial procedures during volunteer surgical missions requires careful planning of personnel, equipment, supplies, and coordination with the host medical institution. Cleft lip and palate repair are the most common oral and maxillofacial surgeries performed, and can be performed safely in low-resource environments when proper care and planning is taken.
- Global Nursing in Low-Resource and Middle-Resource Countries: Challenges and Opportunities in Perioperative Practice** 437  
Kate Pettorini and Mary M. Gullatte
- There are marked disparities in supply and demand for specialty-trained health care providers in low-income and middle-income countries (LMIC). Nurses are at the

forefront in volunteering to provide humanitarian health support in local, national, and international disasters. Responding to the call to provide expert medical and surgical education and care in LMIC aligns with the passion and purpose of nursing. This article shares a real-world experience of perioperative nurses in partnership with the surgical team to provide cleft lip/palate repair for children in LMIC. It is all in the smile left behind.

**Formal Training of the Global Surgeon: Current Educational Paradigms and Critical Elements for Progression** 447

Youmna A. Sherif and Rachel W. Davis

To prepare global surgeons, academic institutions have created training programs that provide opportunities to develop foundational clinical knowledge, pursue academic inquiry, build surgical infrastructure and capacity, and become advocates and collaborators in resource-limited settings. Academic institutions can create a short course in global surgery, global surgery rotation, global surgery fellowship, or integrated global surgery residency. Global surgery training programs must account for ethics of global surgery engagement, sources of funding, structures for professional advancement, and trainee-appropriate partnerships. Global surgery training must include the establishment of accreditation systems, development of integrated training programs, and institutional investment in global surgery education.

**Answering the Call: How to Establish a Dentoalveolar Surgery Mission in Low- and Middle-Income Countries** 457

Victoria A. Mañón, Nagi Demian, Shahid R. Aziz, and Jose M. Marchena

Addressing access to oral health care in many low- to middle-income countries is a complicated issue. Oral and maxillofacial surgeons may help engage with vulnerable populations through carefully planned dentoalveolar mission trips. The process of planning a mission includes selecting a population and identifying their unique needs, designing clinic layouts and workflows, team preparation, collection of supplies, fundraising, and advertising. During the mission, methods for protecting privacy, delivering treatment that is standard of care, and sanitation/sterilization options are reviewed. Ethical considerations include avoiding exploitation of vulnerable populations, offending local hosts, need for data collection, and long-term mission sustainability.

**Developing a Sustainable Program for Volunteer Surgical Care in Low-Income and Middle-Income Countries** 471

Vennila Padmanaban, David Hoffman, Shahid R. Aziz, and Ziad C. Sifri

Volunteer medical missions to low-income and middle-income countries have been a popular but unregulated method of providing care to underserved regions of the world as they work to improve surgical capacity. This article addresses various organizational tenets, such as forming a mission statement, selecting a site location, determining funding sources, establishing a team, patient safety, organization, and postoperative care and follow-up.

**The History and Mission of Smile Train, a Global Cleft Charity** 481

Angela S. Volk, Matthew J. Davis, Priya Desai, and Larry H. Hollier Jr.

Cleft lip and/or palate (CLP) is a common congenital anomaly with a global impact. One organization attempting to decrease global burden of CLPs is Smile Train. Since

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1999, Smile Train has empowered local medical providers to provide comprehensive and sustainable cleft care. Partner surgeons have performed more than 1.5 million operations for patients with CLPs in more than 90 countries. This article outlines the history and mission of Smile Train and details the organization's efforts to increase hospital-wide safety, provide education and training opportunities for partners, and use technology to improve the delivery of cleft care on a global scale.

### **Creating the Successful Global Maxillofacial Surgeon: A 35-Year Perspective**

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James E. Bertz, Ghali E. Ghali, and Thomas P. Williams

The success of global outreach surgical programs depends on many factors including the preparation of the surgeons involved in the program. Surgeons in preparing for global outreach programs often focus on surgical procedures or techniques as the most important aspect of the preparation for the program. Just as important to success of the outreach program is the surgeon's familiarity with the language, cultural, and social norms of the host country or region. This article provides valuable information on these issues from three oral and maxillofacial surgeons who have been engaged in global oral and maxillofacial surgery outreach programs for decades.