



Successful surgical missions for cleft

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Cleft lip and palate (CLP) is the most common oro-facial anomaly in the world, and constitutes a significant global disease burden. It is well known that infants with CLP have increased risk of dying in the first year of life compared to normal controls, probably due to malnutrition and infection¹. Surviving babies with CLP are destined to live with problems of speech, hearing, facial esthetics, and psychosocial well-being. In addition, many babies with CLP lack access to basic care due to parental poverty and lack of knowledge. Therefore, comprehensive cleft care including well-timed surgery is needed to reduce the risk of dying and for subsequent quality of life.

Fortunately, humanitarian surgical missions for patients with CLP in developing countries have a long history. Non-governmental, mission-based organizations such as Smile Train, Operation Smile, and Interplast² as well as smaller scale, charitable groups³⁻⁵ have conducted global missions for CLP care in low-income countries. The World Health Organization recognized more than 55 countries as in danger of “health workforce crisis” and in need of education and development of a novel CLP training program⁶.

A successful mission needs to be based on some certain principles. The mission model from Global Standards of Care, which were developed by Operation Smile, emphasizes safe CLP surgery, patient-centered care, and mission programs in local health systems⁷. A study reported that the fistula rate after palatoplasty is 20-fold higher during mission operations than in craniofacial centers of a high-income

country⁸. Volunteer workers have to reconstruct the CLP, maximizing patient and wound safety with minimal complications. Components of health system integration must act in accordance with national regulations, respect local facility practices and customs; and partner with locally based entities. Also, patient centeredness is important for ensuring that missions provide high-value care to patients based on their social and cultural expectations. Surgical methods and protocols also might need to be modified to fit the patient’s condition.

Surgery is considered an integral component of global health care. CLP surgery is recognized to be very cost-effective compared to other global health issues⁹. International CLP care could be carried out in two ways, through surgical missions and by establishing comprehensive care centers (CCCs). A CCC for CLP is a permanent institute that provides not only surgical interventions, but nutritional care, speech therapy, psychological consultation, and dental treatments. A CCC provides CLP care at a higher cost-effectiveness compared to the mission strategy¹⁰. However, surgical missions still have an important role as an initial step toward more sustainable local health care, like a CCC. Furthermore, through international missions, the deficiency of human resources, i.e., properly trained cleft surgeons and anesthesiologists, can be reduced.

Korean oral and maxillofacial surgeons have engaged in global surgical missions for patients with CLP and related facial deformities since the early 1990s. I have taken part in many surgical missions, and several Korean oral and maxillofacial surgeons have delivered high-quality surgeries via short-term international mission trips. Additionally, we trained in-country doctors on cleft surgical techniques and concepts of CLP care. Although our missions benefit many poor patients in the short term, most patients fail to receive long-term treatments, and data on sustained outcomes are rare.

In conclusion, a responsible CLP mission must provide safe and effective surgical care for patients. Especially, CLP care requires long-term treatments, including well-timed surgical

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interventions and longer follow-ups. The ultimate goal for a global mission is to establish a treatment center providing long-term care. A CCC may be established de novo or within existing local infrastructure. Korea has a current per capita income of US\$30,000. Thus, fundraising efforts are needed to establish a CCC.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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