Rebuilding Global Plastic Surgery Services and Safeguarding Workforce Density after COVID-19

A recent report has found that approximately 150,000 health care workers have been infected with the SARS-CoV-2 virus, resulting in more than 1400 deaths. Of the 32 reported deaths of doctors in the United Kingdom due to coronavirus disease of 2019 (COVID-19), one was a plastic surgeon. Although the loss of any colleague is tragic, this pandemic will have an unprecedented and disproportional effect on low-income and middle-income countries and our collective global surgery aspirations.

Recently, an extensive scoping review of health care workers’ COVID-19–related infections and deaths worldwide was published. Interestingly, the majority of documented health care worker deaths were seen in specialties not routinely associated with exposure to oronasal secretions, thereby highlighting the risk to all surgeons, including our plastic surgery community. While in the United Kingdom there are approximately 900 plastic surgeons, with over one surgeon per 100,000 people, the majority of countries worldwide are not as well equipped. For example, in Malawi, there are only three qualified plastic surgeons, representing 0.01 surgeons per 100,000 people. These figures are consistent across the multitude of low- and middle-income countries. The implications, therefore, of COVID-19 on the plastic surgery workforce in such countries are striking, with one death in Malawi representing a loss of 33 percent of the qualified plastic surgeons.

The Lancet Commission on Global Surgery revealed the importance of an adequate surgical, obstetric, and anesthesia workforce density, due to a clear positive association between surgical, obstetric, and anesthesia workforce density and reduced morbidity and mortality rates and increased life expectancy. The Lancet commission’s target of at least 20 surgical workers per 100,000 aimed to provide equality in health system staffing and patient outcomes. However, as many of our plastic surgery colleagues around the world (and particularly in low- and middle-income countries) are working exclusively as COVID-19 doctors, plastic surgery units are being converted to COVID units (e.g., the biggest plastic surgery specialist hospital in the world, with 500 beds and based in Dhaka, Bangladesh, is currently used solely for COVID-19), and personal protective equipment remains sparse and supply chains broken, we must act swiftly and in unison to safeguard global plastic surgery.
The Effect of COVID-19 Pandemic on Plastic Surgery Practice in a Tertiary Health Care Center in Egypt

The coronavirus disease of 2019 (COVID-19) pandemic resulted in massive challenges facing plastic surgical practice all over the world. These challenges included limited theatre spaces, surgical and anesthetic staff, and resources and efforts to limit contacts by decreasing hospital visits. Different policies and measures have been implemented by institutions all over the world, and learning about this variability helps in better management of future events. In this article, we present our experience in the plastic surgery department of one of the largest tertiary care hospitals in Cairo, Egypt.

The policy adopted by the Egyptian health care system involved screening of all patients, with separation of COVID-19 and non–COVID-19 patients and treating them in separate hospitals. At our institution, Ain Shams University, screening has been done using full blood count, computed tomography chest scans, and rapid COVID-19 testing. After the initial screening, suspected COVID-19 as well as respiratory symptomatic cases have been offered the COVID-19 polymerase chain reaction test as well. Patients with confirmed COVID-19 cases are then transferred to COVID-19 hospitals.

Efforts to decrease patients’ hospital visits have been made to decrease pressure on overwhelmed hospital departments and to decrease contact and transmission of the disease. All elective surgeries have been stopped. Only trauma and urgent tumor patients have been offered surgery.

For trauma patients, we set minor procedure rooms in the emergency department so that patients could have definitive management on their first visit. These patients did not have to undergo the COVID-19 screening investigations. We extended the use of wide-awake, local anesthesia, no tourniquet (WALANT) treatment in these rooms to include simple tendon, digital nerve, and fracture injuries. Reusable splints and absorbable sutures have been used. We have avoided buried Kirschner wires. Patients and relatives looking after them have been taught wound care and given physiotherapy instructions and exercises. Maxillofacial procedures are considered high-risk procedures. Wearing level 3 personal protective equipment in all cases has been mandatory. Most zygomaticomaxillary, nasal, and orbital fractures have been managed conservatively. Even mandibular fractures have been managed with the minimum amount of intervention possible. For burn patients, our burn unit has been used to manage non–COVID-19 burn patients. Burn patients with suspected or confirmed COVID-19 have been transferred to a quarantine hospital regardless of the percentage of the body burned, with recruitment of burn surgery staff to take care of these patients there.

For cancer patients, surgeries for slowly progressing tumors, such as small, recent skin basal cell carcinomas, have been postponed. Head and neck cancer surgeries imposed a great challenge to our department due to the high risk of COVID-19 transmission and the need for intensive care unit beds postoperatively. For breast cancer patients, only implant-based protective equipment supply chains) and supporting our plastic surgery colleagues in low- and middle-income countries. Plastic surgery training in low- and middle-income countries must continue, and may require further development of our virtual teaching, e-learning, webinar, and simulation resources.

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