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## Post-COVID Reflections and Practice from the Oral Surgeon's Perspective

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### **Abstract**

#### **Introduction**

*Globally, the post-COVID era has afforded practitioners the opportunity to evaluate the quality assurance measures for continued safe service delivery. The preventive measures against COVID-19 have been relaxed and most intense care units and hospital bed spaces dedicated to the management of COVID-19 cases have been relaxed or, in some places, closed.*

#### **Methods**

*The study was conceptualized as a narrative review of focal literature that focused on the COVID-19 and its impact on the practice of oral and maxillofacial surgery and dentistry. The study built a synthesis to describe the post-COVID era and the reflections on dental practice and oral and maxillofacial surgery. Literature searches were carried out using PubMed and Google Scholar with no search filters, using Boolean Logic "AND" and "OR." Searches of the literature cited by eligible studies were also performed.*

#### **Expert opinion**

*There is the assumption that all trainers and trainees have been vaccinated and less at risk of contracting COVID-19 and Oral and Maxillofacial Surgical training has returned to the pre-COVID approach where physical contact and bedside teachings are no longer restricted. All specialties of dentistry conduct training programs with minimal restrictions on physical contact and one-one interactions between trainers and trainees.*

**Keywords:** *Coronavirus, WHO, Aerosols, Patient services, Training, Post-COVID*

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### Introduction

COVID-19 pandemic (coronavirus disease 2019) caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) was first reported in the city of Wuhan, Hubei Province, China, in December 2019.<sup>1</sup> It spread rapidly worldwide and became a major global pandemic that changed our clinical standard operating procedures in Oral and Maxillofacial Surgery and Dental Practice.

Aerosolized transmission of COVID-19 presents an ongoing risk in dental practice, where high-speed air rotors, which aerosolize saliva, are frequently used.<sup>1-3</sup> Human-to-human spread of COVID-19 occurs primarily either by direct contact or during dispersion of droplets when an infected person coughs or sneezes.<sup>2</sup> There was panic and apprehension globally at the peak of COVID-19, with its attendant mortality and morbidity. Healthcare services were overwhelmed, including intensive care units. Dentistry, otorhinolaryngology, and anaesthesiology practices were deeply impacted because the virus spreads via the respiratory system and droplets. Dentistry and Oral and Maxillofacial Surgical services were initially limited to only emergency care until the introduction of personal protective equipment, PPE. Soon after, protocols were introduced in the Dental and Maxillofacial Practice for the safety of patients and staff.

Globally, the post-COVID era has afforded practitioners the opportunity to evaluate the quality assurance measures for continued safe service delivery. The preventive measures against COVID-19 have been relaxed and most intense care units and hospital bed spaces dedicated to the management of COVID-19 cases have been relaxed or, in some places, closed.

### Standard operating procedure for COVID-19 prevention

The nature of the virus was initially unknown and testing of the general population for COVID-19 was not available. The initial clinical protocol was the assumption that all patients attending Oral and Maxillofacial Clinics and Dental Practices for treatment were regarded as potentially COVID-19 positive patients.<sup>3</sup> Personal protective equipment, PPE, were a necessity to protect both staff members and patients from potential cross-infection with COVID-19. The availability of PPE was limited, and different Oral and Maxillofacial Centers and Dental Clinics advanced a PPE allocation protocol to determine which procedures were most likely to require the use of personal protective equipment.<sup>4</sup>

The allocation of PPE was defined according to the aerosol production potential of the various surgical and dental procedures.<sup>3</sup> The aerosol-producing procedures were classified as procedures that require use of rotatory, ultrasonic, or external water-cooling equipment. The PPE for such procedures includes N95 face

masks, face shield, long-sleeve disposable waterproof gown and head covering. Aerosol is defined as a suspension system of liquid or solid particles in a gaseous state generated by coughing, sneezing, or any other act that expels oral fluids into the air.<sup>5</sup> Dental procedures can lead to the generation of droplets, aerosols, and spills that are contaminated with saliva, which may lead to cross-infection in Oral and Maxillofacial Surgical practice and dental clinics. Dentists and Oral and Maxillofacial Surgeons are at a high occupational risk of infection with COVID-19.

The non-aerosol producing procedures did not use rotatory, ultrasonic, or external water-cooling equipment. Such procedures have reduced risk of generating droplets that could lead to cross-infection in the clinics and, therefore, require only regular face mask, face shield, long-sleeve disposable gown and head covering.

### **Post-COVID clinical practice and training**

In the present day, there is decreasing trend in COVID-19 mortality and morbidity, and decline in COVID-19-related hospital admissions. The World Health Organization, WHO, noted reducing risks to human health due to high level of population immunity to SARS-CoV-2.<sup>4</sup> This may be due to widespread vaccination against COVID-19. On May 5, 2023, WHO determines that COVID-19 is now an established and ongoing health issue which no longer constitutes a public emergency of international concern.<sup>6</sup>

During the pandemic, there were several changes in the policies and guidelines of our healthcare and training centers. There was reduction in management of non-emergency cases, more cautious approaches and preventive measures were taken in operating rooms, especially in high-risk cases. For the continuation of quality residency training, academic activities such as journal clubs, case presentations, tumor board and grand rounds are of utmost importance. During COVID-19 pandemic, significant adjustments were made to accommodate telemedicine and zoom meetings, to make up for the lost physical interactions.

The post-COVID practice of dentistry and Oral and Maxillofacial Surgery has returned to the pre-COVID modalities. The need for routine screening of patients and staff for SARS-CoV-2 has been relaxed. Both non-emergency and emergency cases are routinely managed with universal precautions. Aerosol-generating procedures are done with regular face mask, face shield, long-sleeve disposable gown and head covering. The Oral and Maxillofacial Surgical training has returned to the pre-COVID approach where physical contact and bedside teachings are no longer restricted. All specialties of dentistry conduct training programs with minimal restrictions on physical contact and one-one interactions between trainers and trainees. There is the assumption that all trainers and trainees have been vaccinated and less at risk of contracting COVID-19.

## Conclusion

Currently, it does seem clinical activities, including academic and patient interactions have fully returned to the pre-COVID era. Personal protective equipment is no longer utilized in the clinics. The current standard operating protocol is the universal protection for staff and patients.

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