



## Dentists Fighting Covid

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Drs. Ghebreyesus and Varenne,

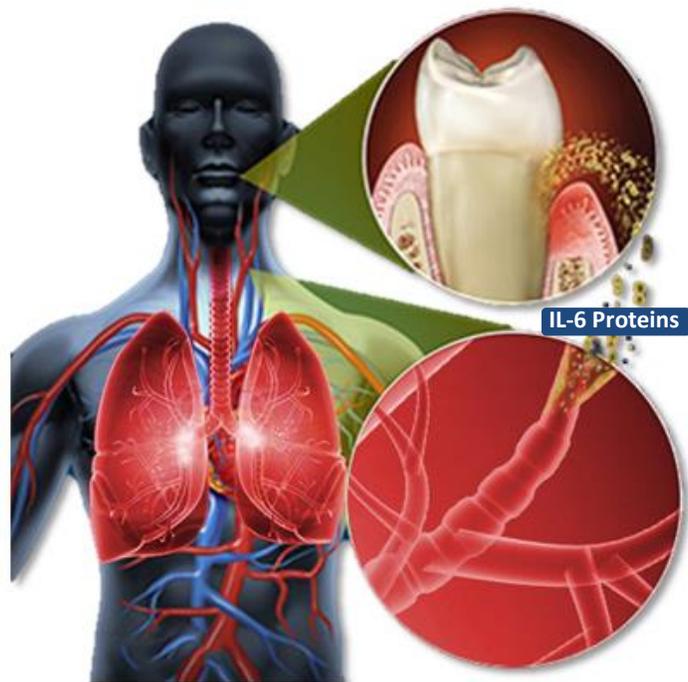
Tuesday, Sept. 8<sup>th</sup> 2020

We are an international group of leading dental researchers, dentists, and oral healthcare experts committed to helping our patients maintain oral health while protecting them from the coronavirus pandemic. In fact, it is this commitment that has brought us together to send you this letter and this plea: we strongly urge you to reconsider your recommendation to dental patients worldwide that they should postpone “*nonessential*” visits to their dentists for things like teeth cleanings and testing for gum disease.

**We’re reaching out to you both as well as the entire governing body of WHO because we believe your recommendation is irresponsible, unsubstantiated and dead wrong. Further, we believe that, if heeded, your recommendation will jeopardize the health of billions of people worldwide, and, as we explain below, we fear it will increase the severity of life-threatening complications for those who’ve contracted COVID-19.**

We are Dr. Carla Pontes, an oral and system disease researcher in South Africa with a Ph.D in Health Sciences, Dr. Victoria Sampson, a UK-based dentist whose research on COVID-19 and gum disease is ranked in the top 1% of all papers published in scientific journals and Dr. Shervin Molayem, a U.S. periodontist, dental surgeon and founder of the UCLA Dental Research Journal.

Why are we alarmed by your recommendation? Because of our [research suggesting a strong link between gum disease and COVID-19](#). As you may know, periodontitis (gum disease) has been linked to heart attacks, Alzheimer’s disease, strokes, cancer, diabetes, and many other chronic inflammatory conditions. The connection between the bacteria produced by gum disease and these ailments has been well documented through systematic reviews and randomized, controlled clinical trials. Today, however, we are most gravely concerned about the findings of our latest research which suggests that gum disease can lead to high levels of Interleukin-6 (IL-6), a harmful protein which can increase the risk of life-threatening respiratory problems for COVID-19 patients. Our research was prompted by an earlier study on COVID-19 patients in Germany who were tested for IL-6 proteins while hospitalized, in critical condition, and unable to



breathe without the help of a ventilator. We believe that COVID-19 complications and deaths can follow an inflammatory pathway, also referred to as a cytokine storm, from the gums where elevated levels of inflammatory proteins appear in the blood. The study from Germany reported that, when the level of the inflammatory protein IL-6 was above 80pg/ml, there was a 22 times increase in the risk of requiring mechanical ventilation in hospitalized patients. As scientists around the world try to understand why the immune system response to COVID-19 ranges from lack of symptoms to organ complications and death, at this point it is essential to lower the levels of inflammatory markers as a way to increase survival. Treating periodontal disease, as our research suggests, will lower inflammatory markers such as IL2, IL-6, and IL-10, inflammatory markers that are heightened in severe COVID-19 infections.

Our research published in the British Dental Journal and soon to be published in the Journal of the California Dental Association. We strongly believe that this is a must-read article for decision makers because we present solid biological pathways based on previous evidence to explain how bacteria inside the gums and mouth can affect the severity of COVID respiratory complications. Periodontitis and poor oral hygiene have been previously linked to lower pulmonary function, chronic obstructive pulmonary disease, and pneumonia. If you review our research, available at [mouthcovidconnection.com](http://mouthcovidconnection.com), we believe you'll be convinced to rescind your recommendation.

Of course, clinical research will be required to confirm the connection between gum disease and coronavirus as the full spectrum of deadly effects on victims of the novel virus continue to confound doctors and infectious disease experts. Nonetheless, as death rates due to COVID-19 remain tragically high, why take the risk of shutting down routine dental procedures, when they could be contributing to better general health and fewer respiratory complications and a lower death rate of covid-19 patients?

In addition, we have grave concerns about the claims in your recommendation regarding aerosol contamination. First, your recommendation describes it as the main reason to limit dental procedures. Yet this claim is not backed by science, and if so, please reveal it. In addition, your recommendation does not take into consideration the many precautions that have been implemented in dental offices worldwide to address any concerns about airborne particles, surface transfer and any other type of contamination. Dentists, notorious before the pandemic for their maintenance of the cleanest exam rooms of any medical profession, dramatically increased their precautions at the start of the pandemic, adding filters, anti-microbial sprays and ozone machine to their exam rooms and requiring patients to wear face masks, gloves and have their temperature taken, step dentists take themselves, before an exam is allowed to proceed.

While we understand that esthetic dental procedures could be put on hold, procedures that remove bacteria and decrease the chance of having hidden sources of inflammation in the mouth such as teeth cleanings, extraction of infected teeth, root canals, and removal of tooth decay, should continue to be treated. It is also important to note that only 6% of gum issues actually cause pain or discomfort, and therefore most gum disease goes unnoticed by the general public.

In closing, the mouth is not separated from the body and the same blood that flows through our gums and jawbones reach our feet in one minute. All of our organs and systems are highly interconnected, meaning that lack of care to one organ can affect many other organs. In this pandemic, dental care must not be neglected while we wait for more studies on SARS-CoV2 or we may regret doing so later. As healthcare providers, given the stark number of cases, we must do everything we can to eliminate hidden sources of infection and inflammation as a way to positively impact the immune system and potentially lower death

rates. With the appropriate use of PPE and strict infection control protocols, dentists are in a good position to make a difference during this pandemic and save lives.

Please take the time to read the research mentioned above at [mouthcovidconnection.com](http://mouthcovidconnection.com). You will be surprised by the amount of evidence on the relationship between gum disease, lung disease and the severe respiratory problems suffered by covid-19 patients. Because of our research about this connection and the widespread agreement among dentists and medical researchers that oral healthcare plays a role in the fight against cancer, Alzheimer's and other diseases, we urge you rescind your recommendation that patients postpone their dental appointments during this global pandemic.



**Dr. Carla Pontes**



**Dr. Victoria Sampson**



**Dr. Shervin Molayem**