

COVID-19, Dry Mouth and Oral Health Consideration

Lee Wei May¹ and Khor Goot Heah^{2,3*}

¹Lecturer, Centre of Comprehensive Studies, Faculty of Dentistry, Universiti Teknologi Mara, Sungai Buloh Campus, Selangor, Malaysia

²Associate Professor, Centre of Preclinical Science Studies, Faculty of Dentistry, Universiti Teknologi MARA, Sungai Buloh Campus, Selangor, Malaysia

³Head, Oral and Maxillofacial Cancer Research Group, Universiti Teknologi MARA, Shah Alam Campus, Selangor, Malaysia

***Corresponding Author:** Khor Goot Heah, Associate Professor, Centre of Preclinical Science Studies, Faculty of Dentistry, Universiti Teknologi MARA, Sungai Buloh Campus, Selangor, Malaysia.

Received: March 22, 2022; **Published:** March 25, 2022

March 2022 has marked two years since coronavirus disease (COVID-19) was declared as a worldwide pandemic on 18th March 2019 by the World Health Organization (WHO). Patients infected with SARS-CoV-2 virus react in different ways, common symptoms include fever, cough, fatigue and the loss of smell and taste which is particularly widely encounter [1]. However, dry mouth, another symptom associated with COVID-19, is still not widely defined in our society.

More commonly associated with the usage of drugs and other medical problems, dry mouth is reported in 38 to 60% of COVID 19 patients 1 - 2 days after the onset of other common symptoms such as fever and cough [2]. This suggests that dry mouth or xerostomia is one of the early oral manifestations of covid-19. Several authors hypothesized that the binding of SARS-CoV-2 virus to ACE-2 receptors on epithelium cells of salivary gland may be the main cause of this sign [3]. Others theorized that it may be due to the neurotoxic effects of virus at the peripheral nervous system and central nervous system [4]. Therefore, it is essential to highlight that dry mouth might be useful for early diagnosis of patients with SARS-CoV-2 to encourage prompt quarantine in an effort to reduce the infection rate.

To date there are almost 4 million diagnosed COVID-19 cases with 3.6 million patients reported to have recovered in Malaysia. Approximately 11 - 24% Covid-19 patients complained of experiencing persistent symptoms 3 months after oneself of illness [5,6]. This long covid manifests breathlessness, cough, muscle aches, fatigue, and psychological problems [7]. Although the case definition of long covid is yet to be standardized, these complications should be taken into consideration when delivering oral health care. Similar with treating patient with multiple medical conditions, updated medical history is of utmost importance. For instance, patients who are taking immunomodulators or long-term treatment of glucocorticosteroids are subject to further risk of infection. Care should be taken when prescribing medication given decreased renal or hepatic function in some of these patients. Along with anxiety of uncertainties when battling long Covid, patient's motivation and stress tolerance should be considered when planning a treatment. Simple and short treatments are preferred for patients who have experienced chronic fatigue and anxiety. In short, despite the wide prevalence of COVID-19 disease, it is incumbent on all dental practitioners to be well equipped with updated knowledge to provide quality healthcare services to the society.

Bibliography

1. Huang Chaolin., *et al.* "Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China". *The Lancet* 395.10223 (2020): 497-506.
2. Fathi Yaser., *et al.* "Xerostomia (dry mouth) in patients with COVID-19: a case series". *Future Virology* 16.5 (2021): 315-319.

3. Katz Joseph. "Prevalence of dry mouth in COVID-19 patients with and without Sicca syndrome in a large hospital center". *Irish Journal of Medical Science (1971)* 190.4 (2021): 1639-1641.
4. Fantozzi, Paolo J., *et al.* "Xerostomia, gustatory and olfactory dysfunctions in patients with COVID-19". *American Journal of Otolaryngology* 41.6 (2020): 102721.
5. Cirulli Elizabeth T., *et al.* "Long-term COVID-19 symptoms in a large unselected population". medrxiv (2020).
6. Ding Hong, *et al.* "Neurologic manifestations of nonhospitalized patients with COVID-19 in Wuhan, China". *MedComm* 1.2 (2020): 253-256.
7. Davis Hannah E., *et al.* "Characterizing long COVID in an international cohort: 7 months of symptoms and their impact". *EClinicalMedicine* 38 (2021): 101019.

Volume 21 Issue 4 April 2022

© All rights reserved by Lee Wei May and Khor Goot Heah.