

Short Communication

The life in Japan and status of private dental office at the times of COVID-19

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Situation of COVID-19 in Japan

Coronavirus disease 2019, also known as COVID-19, has rapidly become a worldwide emergency. The World Health Organization (WHO) has recently declared the global pandemic (WHO, COVID-19 situation report –88). Since mid-January 2020, there have been cases of infected new COVID-19 cases in Japan. As the COVID-19 is pandemic outbreak, the number of patients in Japan exceeded 1,000 on March 21st and 9,299 on April 17th (Data sourced from Japan Ministry of Health, Labour and Welfare). In order to curb the spread of the epidemic, primary, middle and high school students suspended classes and undergraduate students extended their holidays. Now, the spread of the new coronavirus is continuing. The government announced on April 7th that it made emergency statements for seven prefectures (Saitama, Chiba, Tokyo, Kanagawa, Osaka, Hyogo, and Fukuoka) where COVID-19 infection is spreading across the region, and it expanded the national emergency declaration on April 16th. Facilities and stores that may come into intimate contact, such as recreation facilities, gyms, and bars that serve alcohol at night, are closed due to the government's refraining from doing business. On the other hand, grocery stores, medical facilities, public transportation, banks, etc., which are essential to live, are required to make efforts to shorten business hours and suppress heavy contact. However, those facilities have not been requested or instructed to be closed. Of the medical facilities, hospitals that treat infected people are in a critical

situation, as in other countries, because the number of infected people is increasing day by day. The Japanese Society of Infectious Diseases announced that they should change the way of treatment of infectious diseases and announce the "clinical response to new coronavirus infectious diseases" to clinical sites involving medical treatment. Japanese Prime Minister, Shinzo Abe emphasized that as far as possible not to go out for reasons that are not necessary or urgent, but will not be blocked, in order to reduce the economic pressure caused by new type COVID-19 to the people, the government decided to issue 100,000 yen per person to relieve the stress of new type COVID-19 on people's lives.

At present, the age of patients with onset in Japan is widely distributed from children to the elderly, but more than 90% of deaths are over 60 years old. China, Italy, and United States of America have reported cases of children dying of new type COVID-19, so we should pay take it as a big serious (Sinha et al, 2020; Livingston et al, 2020). One of the three major festivals in Japan, Gion Festival held in Kyoto have been cancelled. In addition, masks have become a necessity for people. Now it is difficult to get masks in Japan. Although the Japanese government has taken measures to deal with new type COVID-19, in the face of the epidemic, it is better for us to wash our hands frequently, ventilate frequently, and avoid gatherings. Not to go out as less as possible, if you have symptoms that are suspected of being infected, you should do your own

home isolation, or follow the hospital's isolation treatment system. This is an essential period for Japanese fight against new COVID-19.

Current status of Japanese private Dental clinics

A few clinics and hospitals where infection has happened were already closed, but most clinics that do not be required to be closed, such as internal medicine, ophthalmology, otolaryngology, and dermatology, provide most of the usual medical care. Dental clinic is one of them. For the time being, the dental clinics offers the same treatment as usual. What is a little different from usual is that while taking precautions to see patients with suspected COVID-19 infection (those who have concentrated contacts with infected person or those who have symptoms). Due to the characteristics of the dental environment, the risk of cross-infection between dentists and patients may be high. In addition, a large amount of droplets and aerosols may be generated during dental treatment, but the standard protective measures in daily clinical work are not enough to prevent the spread of COVID-19, especially when the patients are in the incubation period, are unknown of their infected or conceals their infection (Puisieux et al, 2020). To prevent the spread of infection, dentists are trying to prevent infection between patients and between patients and medical staffs. Medical staffs are engaged in medical care to prevent clusters of infection in the clinic.

Here are the infection control methods in a private dental office (Tada Dental Clinic, Hyogo, Japan) refer to the Correspondence guide to new coronavirus infectious disease in medical institution from Japanese Society for Infection Prevention and Control (March 10, 2020, Japanese Society for Infection Prevention and Control);

- 1) Postpone the non-urgent dental treatment. Reduce the number of outpatient reservations.
- 2) Disinfecting spaces inside the clinic from the front door to the waiting room, reception, corridor, and doors entering the clinic, especially alcohol disinfection of parts that people touch with hands, ventilation and humidification in the room. Use of hypochlorous acid water or stabilized chlorine dioxide in anticipation of an auxiliary effect (effect on COVID-19 is undetermined).
- 3) Reduce the chances of people meeting in the waiting room. Keep people apart in the waiting room, keep chairs as far away as possible, shorten the meeting time or wait in your own car.
- 4) Temperature measurement of every patients.
- 5) Place alcohol sprays for hand disinfection everywhere, and let the patients sterilize his/her hands every time he touches something.
- 6) Staffs wear a surgical mask, goggles, and gloves as usual.
- 7) Use of rubber dam and not only intraoral vacuum but also extraoral vacuum.

- 8) Preparation of protective clothing and caps for the time of serious spread of infection (Masks, disinfectants, goggles, gloves and gauze are hard to come by.)
- 9) Staff temperature measurement, confirmation of symptoms, disinfection of staff room, not to eat and drink in staff room.
- 10) Staff training including thorough disinfection of hands before and after removing the mask or goggles and gloves.
- 11) Staff with daily education and training to prevent infection.
- 12) Distributing masks and alcohol sprays to staffs.
- 13) Request for cooperation to prevent infection of family members of staffs.

The patients themselves are making efforts to control the spread of infection. A questionnaire survey conducted on 180 dental clinics in Hyogo prefecture from March 27th to April 4th, 2020 showed that 46.7% of dental clinics had a decrease in the number of patients examined (Figure 1) (Hyogo Medical Practitioners Association News Paper #1939). Although this is likely to adversely affect the management, economy, employment, etc. of dental clinics, COVID-19 is in a pandemic situation. It is necessary to reduce non-urgent treatments, such as routine dental cleaning and preventive treatments which can help prevent the spread of infection.

In a private dental office (Tada Dental Clinic, Hyogo, Japan), 95% of the patients

visit with wearing their masks. Moreover, over 90% of patients use alcohol disinfection of their hands at the entrance of dental office. At present, the spread and infection rate are relatively slow in the nearby areas. We should pay more attention to the future changes in the number of infected people and consider whether to go to the dental clinic. If the situation is going bad, the dental clinic should be closed in time.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interests.

AUTHOR CONTRIBUTIONS

HT and WS drafted the paper. NI and YK edited and revised the paper. All authors read and approved the final manuscript.

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Figure legends

Figure 1. Changes in the number of patients in 180 dental offices in Hyogo, Japan from March 27th to April 4th, 2020 (7).

Figure 1

