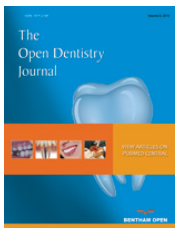

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EDITORIAL

Public Health Emergency of International Concern: Coronavirus Disease 2019 (COVID-19)

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Nowadays, the world is trying to deal with an epidemic respiratory disease caused by a novel (new) coronavirus, which was first detected in Wuhan city, Hubei province of China, and is currently detected internationally at 32 locations. The virus has been named "SARS-CoV-2" and the disease this virus causes has been named "coronavirus disease 2019" (abbreviated "COVID-19") [1].

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization (WHO) declared the outbreak a "Public Health Emergency of International Concern"(PHEIC) [2].

Coronaviruses are enveloped viruses with a positive-sense single-stranded RNA genome and a nucleocapsid of helical symmetry and comprise the subfamily Orthocoronavirinae in the family Coronaviridae [3]. Coronavirus genomes also encode a protein called RNA-dependent RNA polymerase (RdRp), which allows the viral genome to be transcribed into new RNA copies using the host cell's machinery [4]. Coronaviruses are named for the crown-like spikes on their surface. There are four main sub-groupings of coronaviruses, known as alpha, beta, gamma and delta.

Coronaviruses are zoonotic, which means that they are transmitted between animals and humans. Human coronaviruses were first identified in the mid-1960s. Detailed investigations found that SARS-CoV (the beta coronavirus that causes severe acute respiratory syndrome or SARS) was transmitted from civet cats to humans and MERS-CoV (the beta coronavirus that causes Middle East Respiratory Syndrome or MERS) from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans [5]. Early on, many of the patients in the COVID-19 outbreak in Wuhan, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Person-to-person spread has been reported outside China, including in 58 countries reported by WHO on March, 01, 2020 [6, 7]. Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death [5].

Current understanding about how the virus that causes COVID-19 spreads is largely based on what is known about similar coronaviruses. The virus is thought to spread mainly from person-to-person, between people who are in close contact with one another (within about 6 feet), *via* respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It is currently unknown if a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes.

Healthcare workers (HCWs) were infected at high rates during the MERS and SARS outbreaks, with 18.6% of MERS cases occurring in HCWs and 21% of SARS cases occurring in HCWs [8, 9]. The high risk presented by the procedures has implications for medical practice and organization of hospital care during the current infectious disease outbreak. The capacity of COVID-19 to infect healthcare workers has been confirmed.

Standard recommendations to prevent infection spread include regular hand washing, covering mouth and nose when coughing and sneezing. Avoid close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing. Respiratory hygiene/cough etiquette infection prevention measures are also designed to limit the transmission of respiratory pathogens spread by droplet or airborne routes in the Summary of Infection Prevention Practices in Dental Settings, by CDC [10].

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In order to prevent new coronavirus outbreak, hand hygiene, personal protective equipment and respiratory hygiene/cough etiquette trainings should be updated in dental services.

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