



COVID-19 Pandemic and its Connection with Water: A Scoping Review

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Abstract: The world is grappling with the 'Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) outbreak' on one side, and 'water crises, climate change and disasters' on the other have made the situation beyond management. The first case of SARS-CoV-2 was reported in Wuhan City, Hubei province, China in December 2019. This virus belongs to the *Coronaviridae* family, which was first identified in the mid-1960s. During the last two decades, pathogenic strains of this family have been noticed in Saudi Arabia (MERS-CoV, 2012) and China (SARS-CoV, 2003). Although there is some evidence that this virus was originated from bats and then transmitted to humans through an unknown intermediary animal. Size of Coronavirus-2 (CoV-2) ranges from 60-220 nanometers and is surrounded by single-stranded Ribo Nucleic Acid (RNA). CoV-2 spreads through contact from person-to-person (droplet from respiratory over a short distance). As the virus had created a pandemic situation throughout the world, water-related professionals need to understand its connection with the water sector. For this purpose, a literature survey was done, which emphasized on the existence of Coronavirus disease 2019 (COVID-19) in fresh and wastewater, clean water crisis during COVID-19 pandemic, people perceptions, need of Global Water Act, and research scope to address issues of the water crisis.

Keywords: COVID-19, SARS-CoV-2, Coronavirus, Water, Sewage, Global Water Act
