**Environment and COVID-19: A UNESCO COVID-19 Panel**

**Review**

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Much remains unknown about how SARS-CoV-2, the virus that causes COVID-19, spreads through the environment. A major reason for this is that the behaviour and traits of viruses are highly variable - some spread more easily through water, others through air; some are wrapped in layers of fatty molecules that help them avoid their host's immune system, while others are "naked." A recently published in Environmental Science & Technology calls for a broader, long-term, and more quantitative approach to understanding viruses, such as SARS-CoV-2, that are spread through the environment. Many of the root causes of climate change also increase the risk of pandemics. Deforestation, which occurs mostly for agricultural purposes, is the largest cause of habitat loss worldwide. Loss of habitat forces animals to migrate and potentially contact other animals or people and share germs. Harvard study found that a small increase in long-term exposure to air pollution leads to a large increase in COVID-19 death rate. Researchers have found that several viruses, including adenovirus and influenza virus, can be carried on air particles. This particulate matter likely contributed to the spread of the SARS-COV 2. During series of UNESCO COVID-19 skype meeting also highlighted the exponential increase of electromagnetic fields (EMF) emitted from the technology and its role in the increase of the risk of generating different diseases, including virus infection, are vital problems of Public Health. Although the non-thermal biological effects of EMF, which are realized through the quantum-mechanical membrane sensors having non-linear dose-dependent effects, are well documented facts, the ICNIRP guidelines for radiofrequency of electromagnetic fields exposure are only based on its thermal effects and completely neglect the non-thermal ones. However, it is known that mobile phone radiation impacts the cells even when it is below the safety limits. This makes it urgent for environmental engineers and scientists to collaborate on pinpointing viral and environmental characteristics that affect transmission via surfaces, the air and other media especially in the perspective of 5G technology implementations in the world.

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