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A reflexion on the environmental effect on the transmission of COVID-19

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This research is a general reflection of the possible transmission not only of COVID-19 but of any influenza disease depending on environmental parameters such as solar radiation, air humidity and air temperature (vapor pressure deficit), evoking the Penman-Monteith model regarding the evaporation of the water that constitutes the small water droplets (aerosols) that carry the virus. In this case the evapotranspiration demand of the atmosphere with which it can be deduced that the spread of the disease will be higher in those places with less evaporative demand, that is, high air humidity and / or low temperatures, and / or low radiation intensities, and vice versa. It can also be deduced that the hours of greatest potential contagion are the night hours, while those with the lowest risk are between 2:00 p.m. and 4:00 p.m. On the other hand, in those rooms with low temperatures the contagion would be more effective. So, considering that the drops produced by a sneeze, by speaking or breathing can go beyond two meters away, it is roughly explained that the use of face masks and keeping a safe minimum distance of two meters can limit transmission of viruses and / or infections. However, this practice is not entirely safe as the environment can play an important role. What is recommended to reduce the spread of these pathogens is to produce high evaporative demands: increasing solar radiation, and increasing air temperature and reducing air humidity, which is practice that can be effective in closed rooms.