Explantory Note

Friday June 19th, 2020

Our article published by PNAS on June 11th, 2020, titled *"Identifying airborne transmission as the dominant route for the spread of COVID-19"* has been widely accepted and praised by a large majority. However, as expected, a few disliked it. The main reason is that many of the researchers that are working on the COVID-19 pandemic are physicians and/or epidemiologists that have only experience with various types of virus. It turns out that we are part of a different community, namely that connected with air quality, and hence we are very familiar with the properties of the very small particles labeled "aerosols", that penetrate in humans all the way to the lungs causing many deaths. We have close collaborations with many epidemiologists, but it's mainly with those that have worked with air quality, and that have established that there are many deaths caused by people breathing poor air quality aerosols.

In our paper we did not study directly infected aerosols, but we refer to several papers that establish that indeed aerosols ca be infected with the COVID-19 virus. The point of our paper is not to show this point, well accepted by experts; our goal instead was to show that statistics clearly demonstrates the effect of wearing face masks. These masks filter the aerosols that are emitted when people talk; we know, of course, that the masks not always function perfectly.

The people that question our paper have no idea of the role of aerosols, and naively think that the only worry are the large drops that people emit when coughing or sneezing, and do not trust us because we belong to a different community. It is now quite common in the scientific world to collaborate with scientists in different disciplines.

In summary, we have not seen any single reasoning that seriously questions our paper; of course, we are willing to discuss the science, but the objections so far are plainly a matter of ignorance.

-Prof. Mario J. Molina