Does COVID-19 have a seasonal pattern?

Since the SARS-CoV-2 virus started to circulate in the different countries that the COVID-19 pandemic has reached, a possible seasonal pattern in the presentation of the disease has been hypothesized.

To study the seasonality of diseases, researchers normally focus on several factors, which include the relationships between the pathogen, the environment, and human behaviour. In the COVID-19 context, infectious disease ecologist Micaela Martinez of Columbia University is investigating a different factor that might eventually affect the disease’s incidence: the possibility that the immune system may change with the seasons and/or over with the course of the day. Although early analyses from her study do not present strong evidence supporting seasonality, they do show that specific subsets of white blood cells that play central roles in immune system memory and response are elevated at certain times of the day.

It is currently unknown whether COVID-19 will have a seasonal pattern, as more data is required to establish seasonality. Furthermore, as humanity has not had a chance to build immunity to the COVID-19-causing virus yet, potential seasonality may only appear in the following years.

The global COVID-19 emergency may bring more attention to the research of the disease and virus causing it, and help speed discoveries. The contributions of the studies carried out by Martinez and colleagues may be beneficial for public health since the characteristics of seasonal variation of the immune system could be, in the future, used in our favour.

Reference:


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