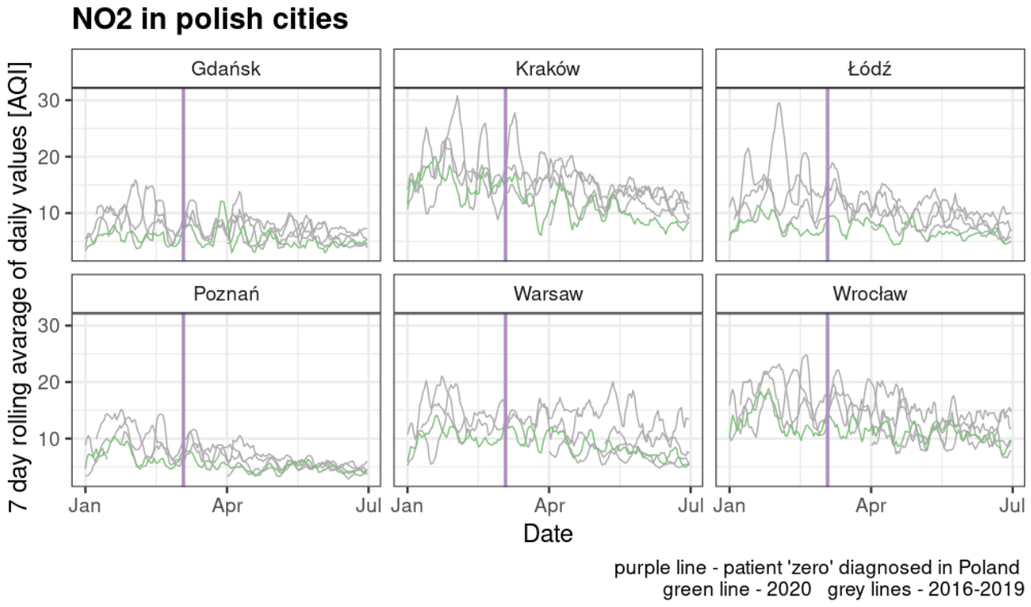
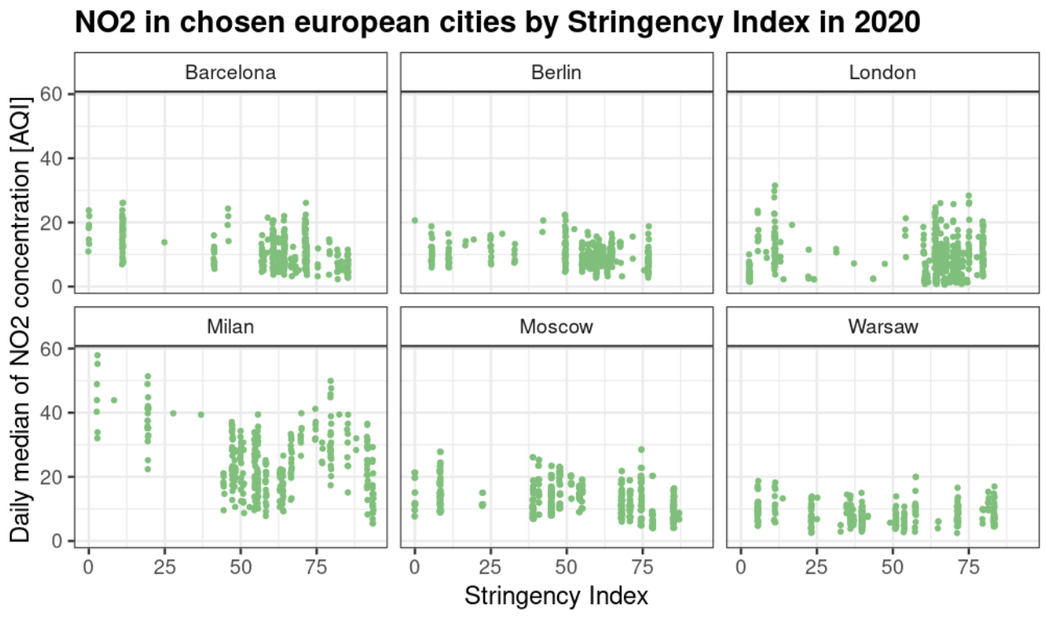
COVID-19 vs Air Pollution

Air Quality Index [AQI] is a uniformed scale defined by the US-EPA 2016 standard for different air pollutions (*aqicn.org/scale*).

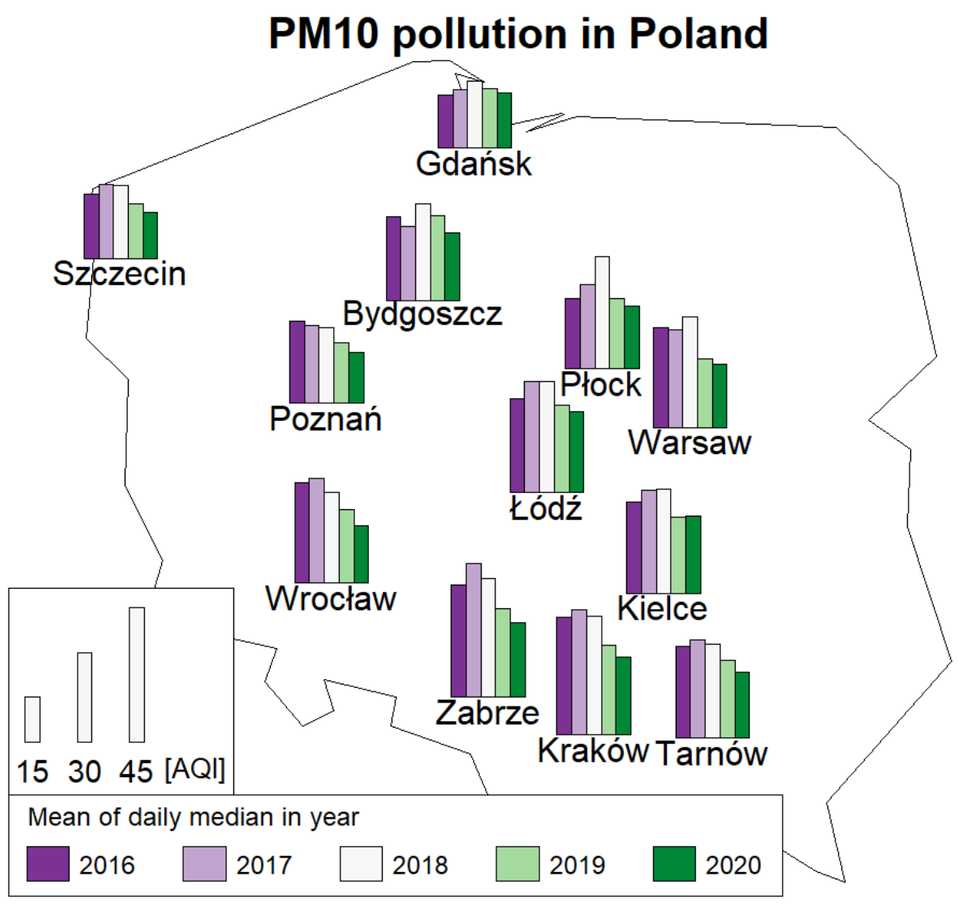


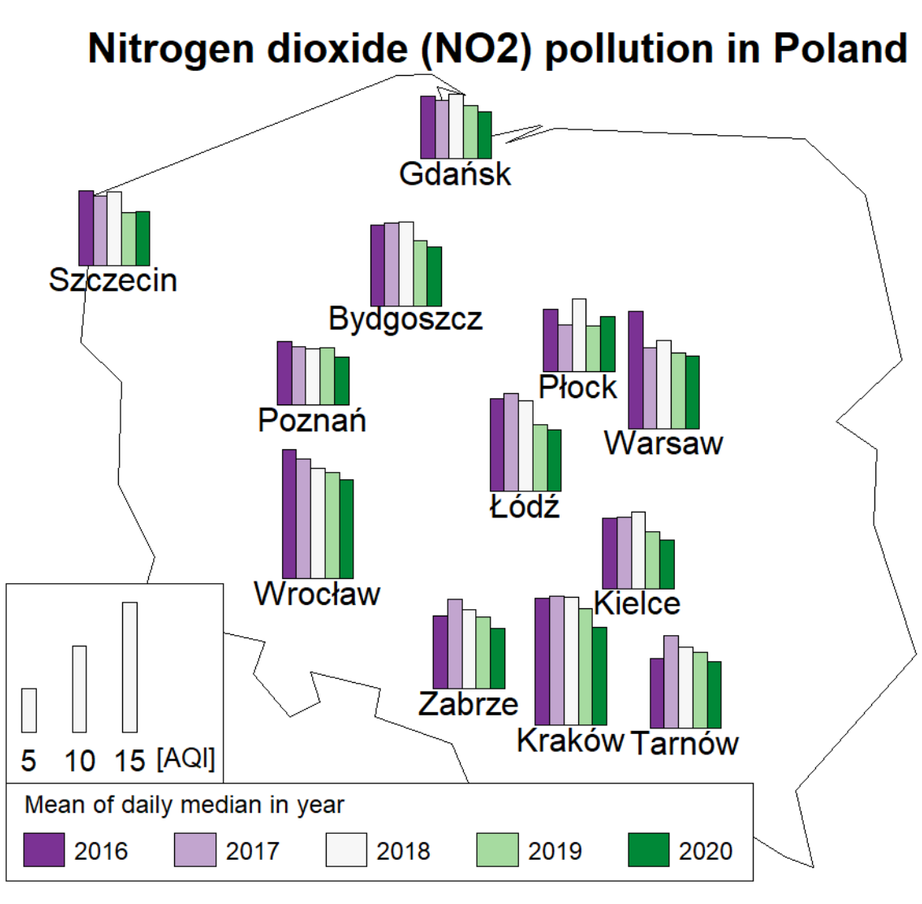
Air in Poland in 2020 was **less** polluted than in previous years, but it is rather an effect of a **trend** than a result of COVID-19 pandemic (look on the maps below).

Government **Stringency Index**:
a composite (0 to 100 pts) measure of governments' response metrics, such as: school closures, travel restrictions. A higher score indicates a stricter government response.



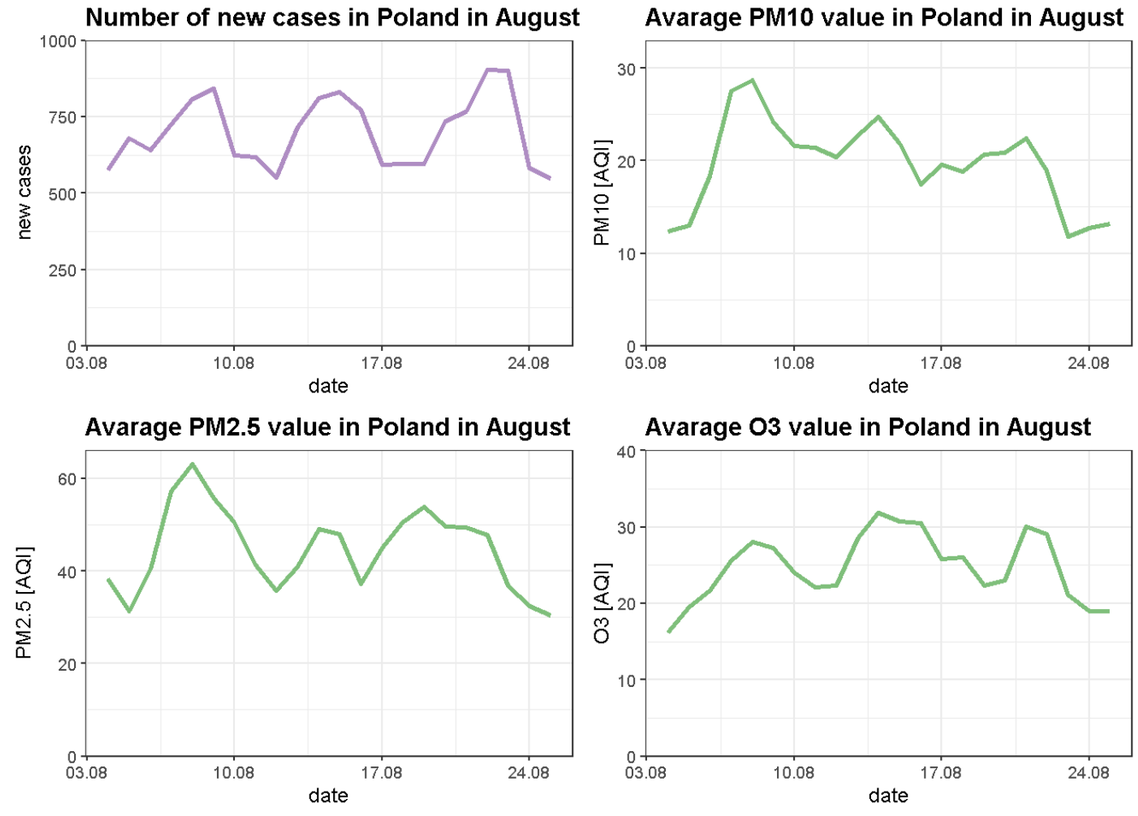
Air pollution **does not change** with the rise of Stringency Index.





These two maps compare AQI of specific air pollution in Poland in selected cities. We can observe **improvement of air quality** in 2020 in comparison to previous years. However, the impact of COVID-19 pandemic on this phenomenon is highly questionable. Analysis of these statistics suggests that air is less polluted due to a **general trend**. Improvement of air quality is **not heavily related** to changes of a lifestyle during the **pandemic**.

These diagrams present different values: the first one with a purple line shows the number of **new cases** of COVID-19 and the other ones show the amounts of **PM10**, **PM2.5** and **O3**. The data is shown on the example of one month (August) to make it clearer. Even though there are different values on the plots, it is easy to see that all the lines have **similar shapes** with three "hills". This suggests that these four factors **might be related** to each other. For example worse air quality could result in people being more susceptible to the disease of COVID-19.



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