

Respiratory Diseases from a data driven perspective

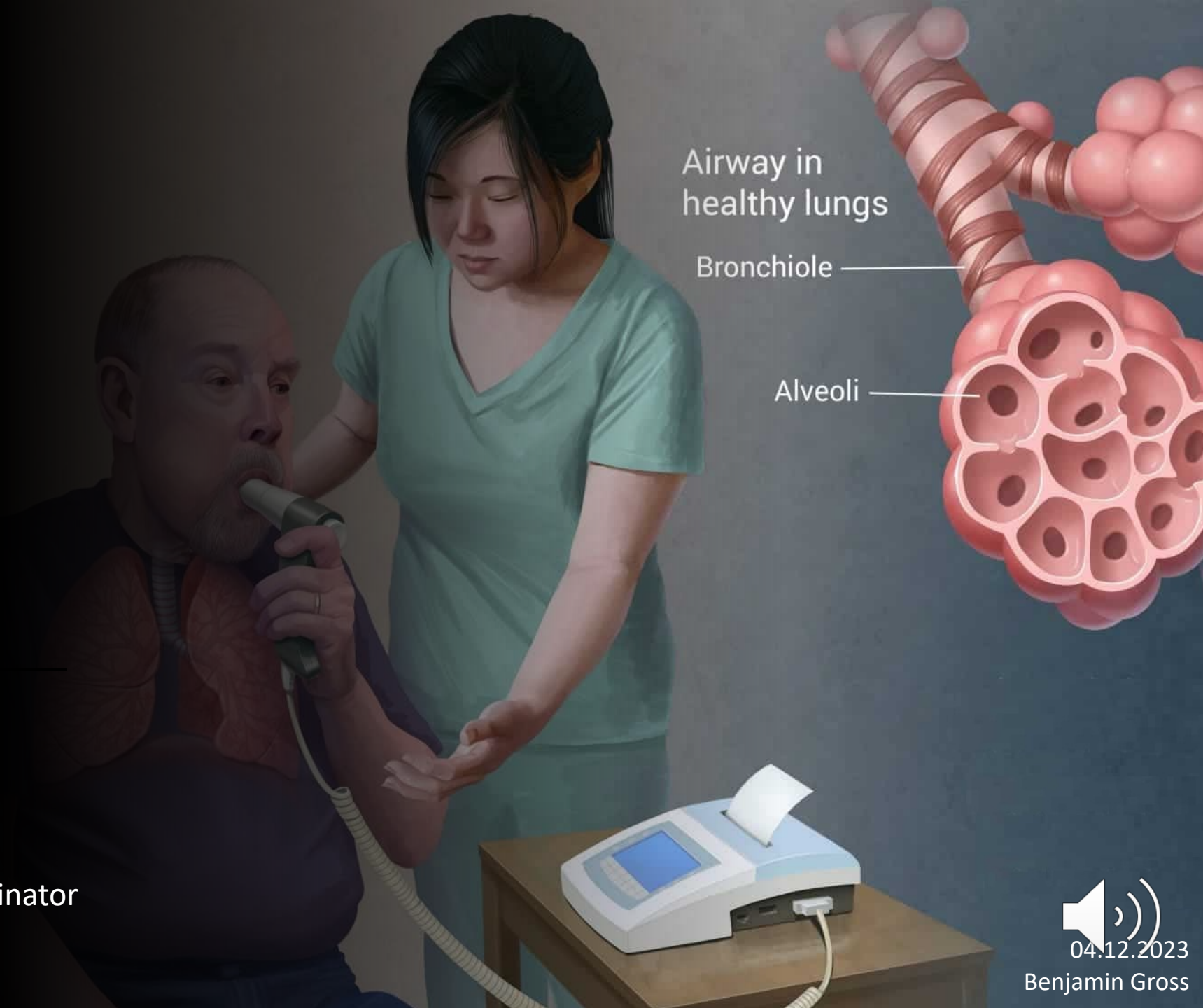
to the management team
of the

Good Hope

Physiotherapy Clinics

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Key findings

- Environment circumstances have an influence on health.
- Lifestyle choices affect the risk of developing a respiratory disease.



Air pollution (Particulate matter)

A mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope (EPA, 2023).

Particle pollution includes:

- **PM₁₀** : inhalable particles, with diameters that are generally 10 micrometres and smaller
- **PM_{2.5}** : fine inhalable particles, with diameters that are generally 2.5 micrometres and smaller.

Reference

EPA (2023), 'Particulate Matter', *United States Environmental Protection Agency*, Available at <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>

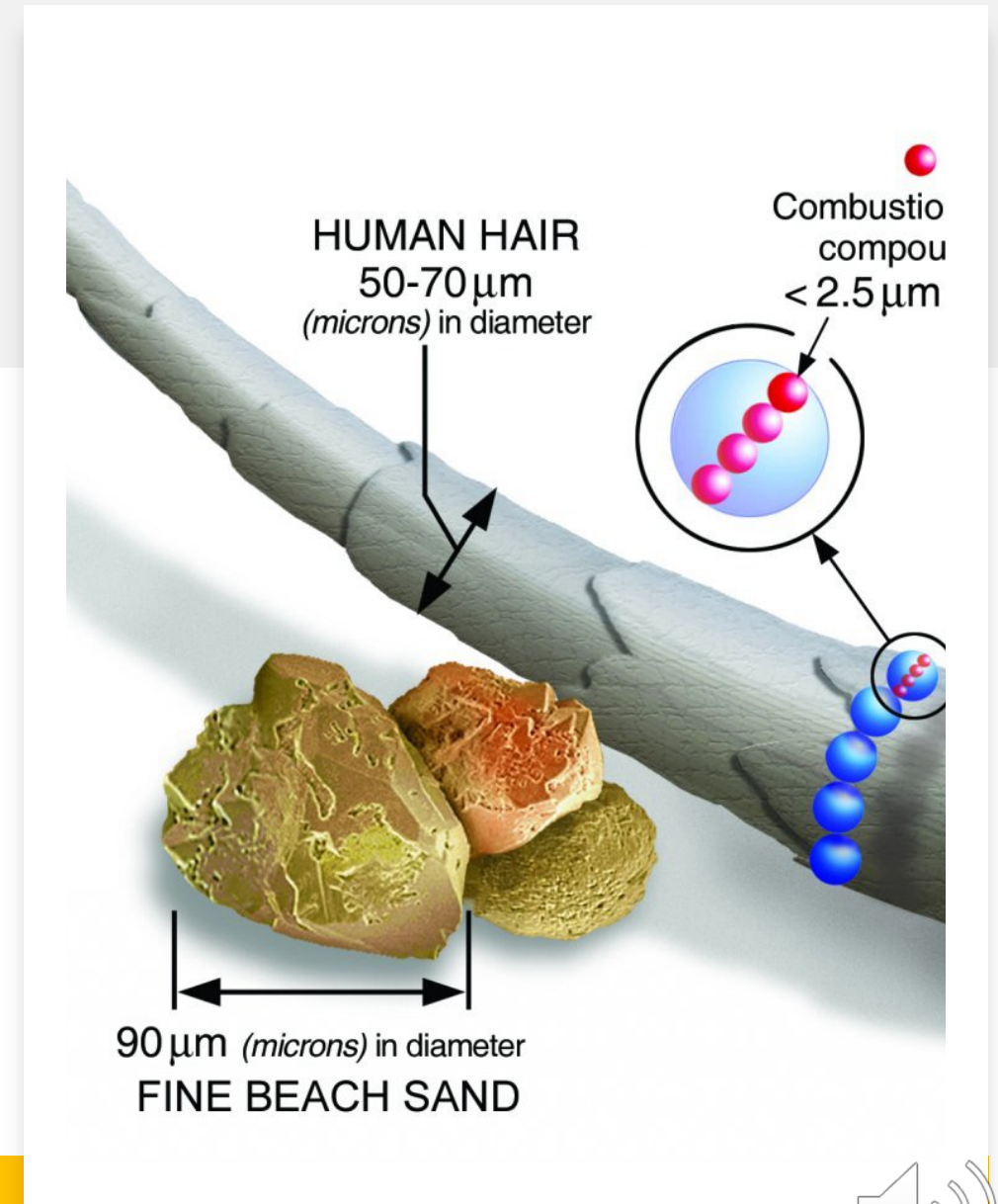
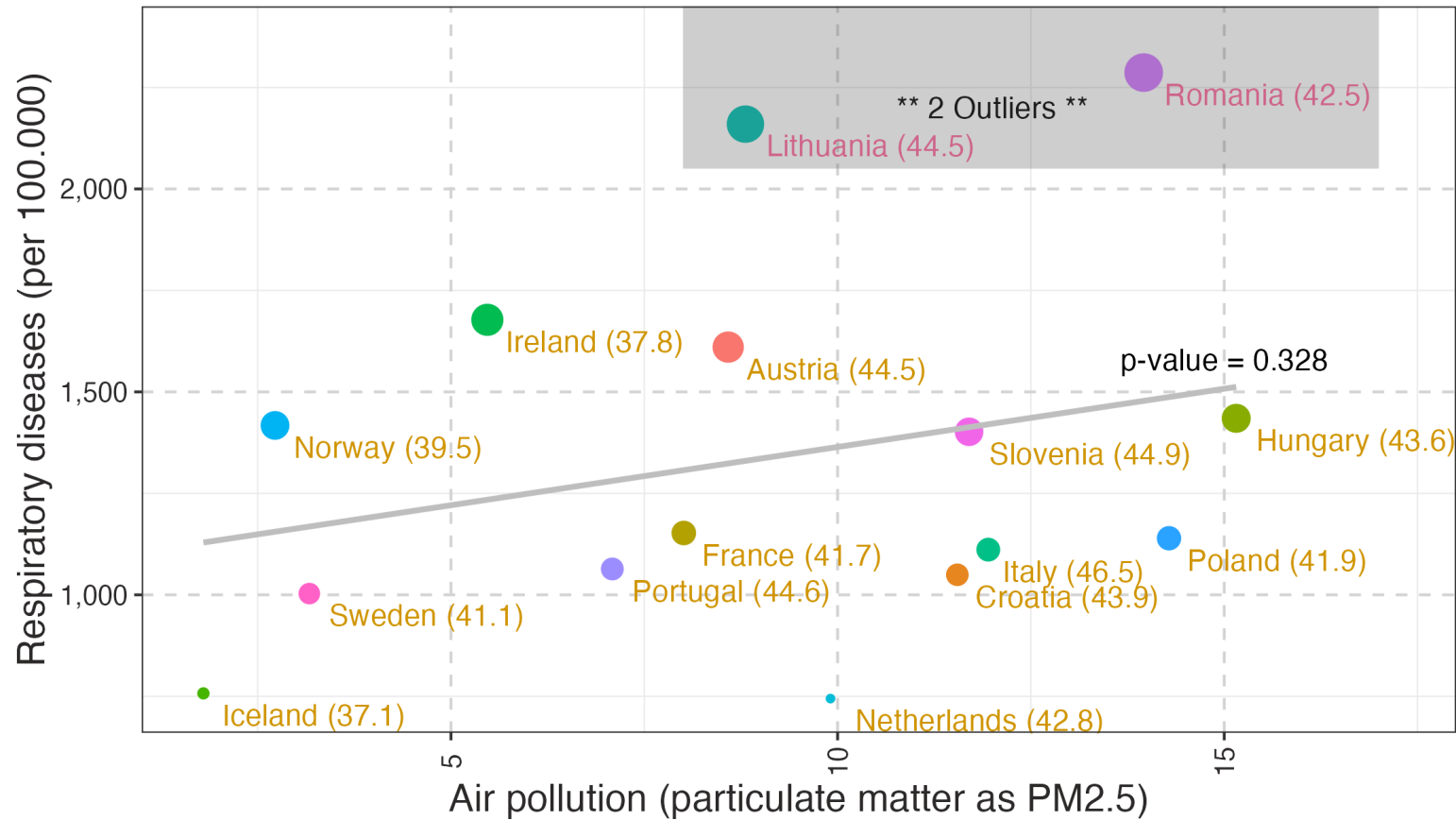


Figure A: Respiratory diseases in 15 european countries

in correlation to air pollution, median age in brackets (year 2019)



Data source: OECD health data & <https://github.com/dw-data/edjnet-pm2p5>

Air
pollution



Obesity is a common, serious and costly chronic disease of adults and children. It has nearly tripled since 1975 (WHO, 2021).

Obesity

Body-Mass-Index

BMI 25.0 to 30 is in the **overweight** range.

BMI 30.0 or higher is within the **obesity** range.

Reference

WHO (2021), 'Obesity and overweight', *World Health Organization*, Available at <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>

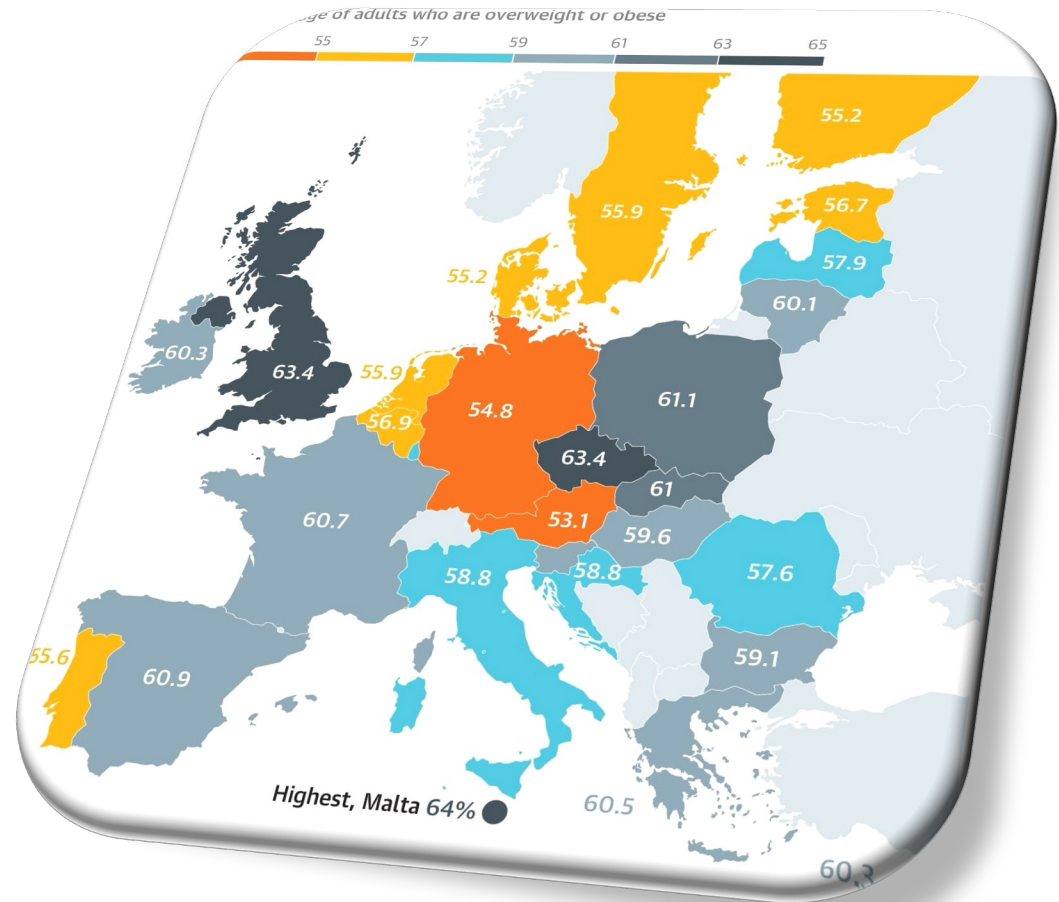
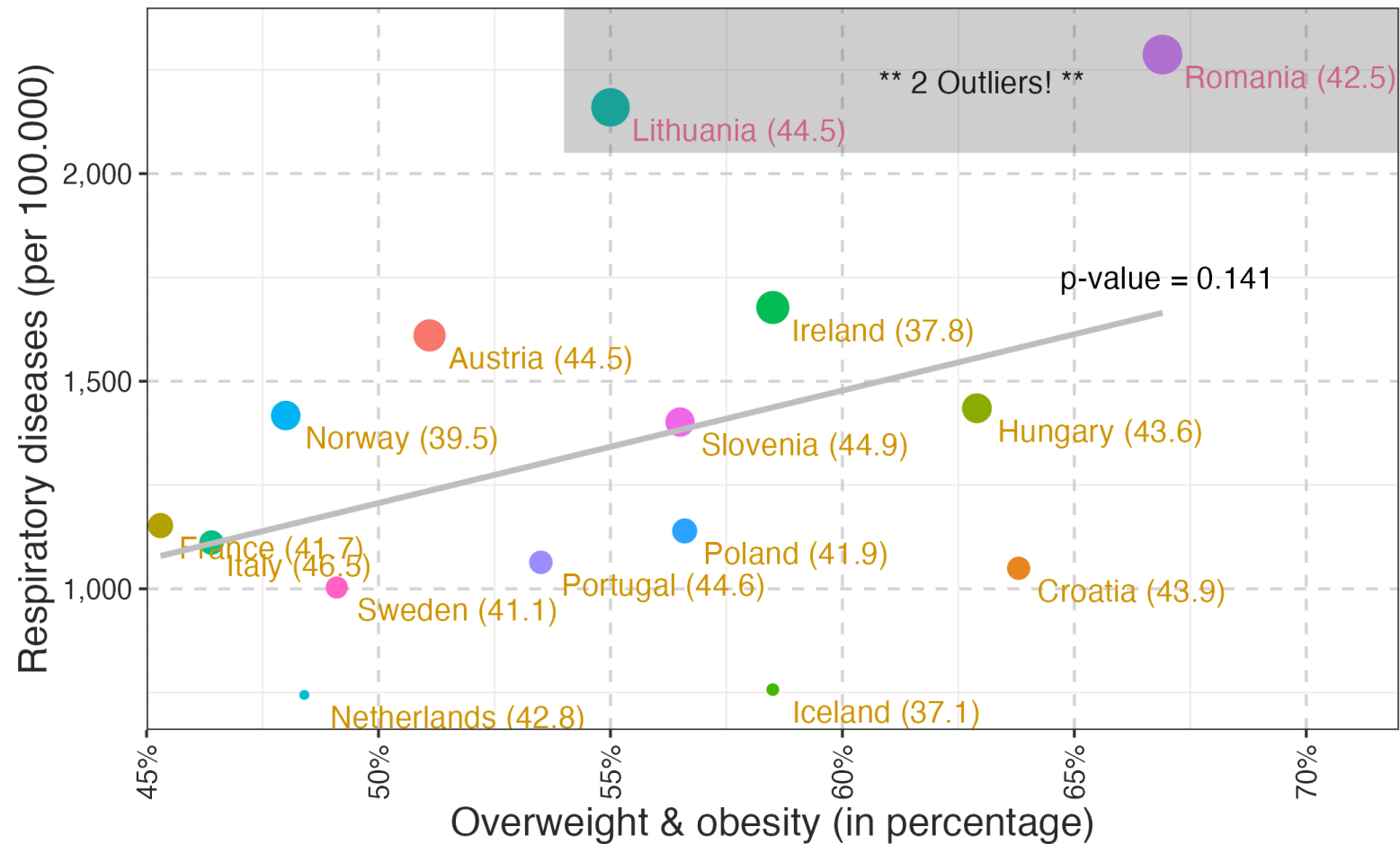


Figure B: Respiratory diseases in 15 european countries

in correlation to overweight & obesity, median age in brackets (year 2019)

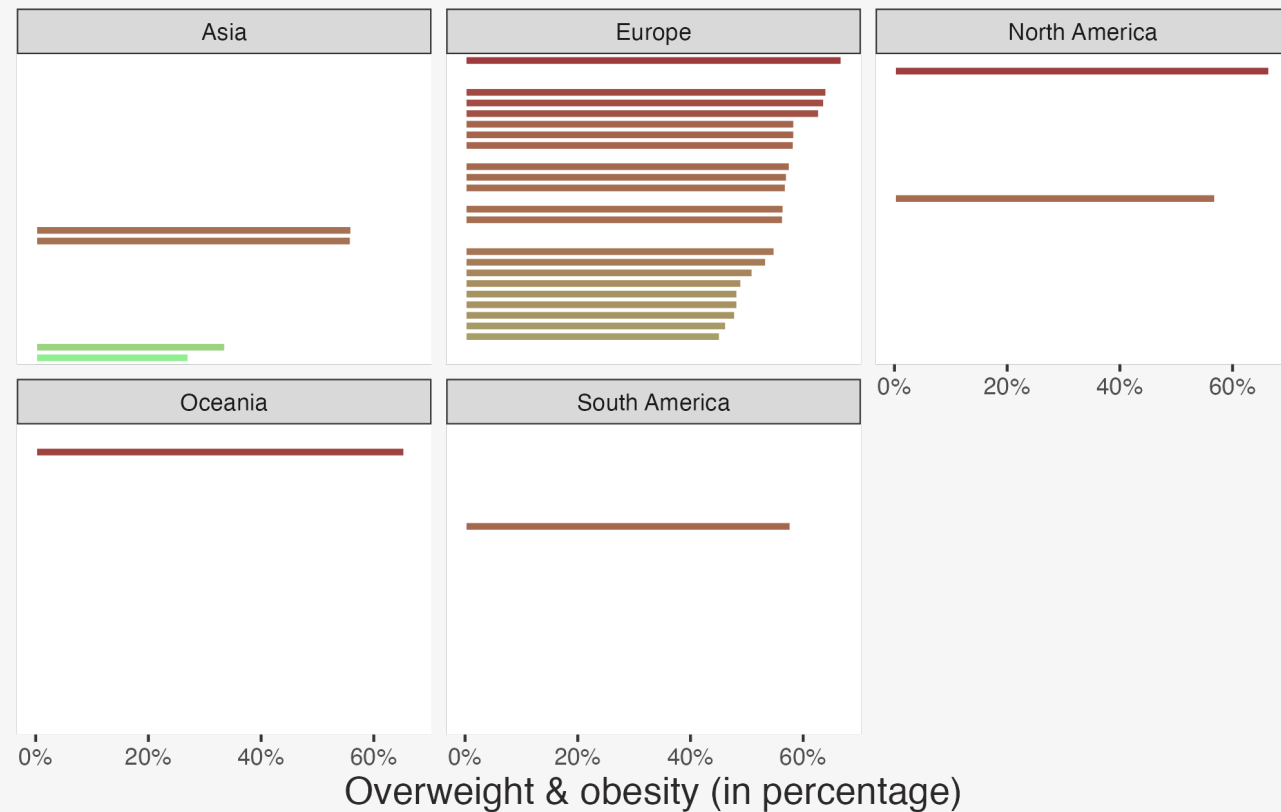


Data source: OECD health data

Overweight
& Obesity



Figure C1: Overweight & obesity
for 29 countries, grouped by continents (year 2019)

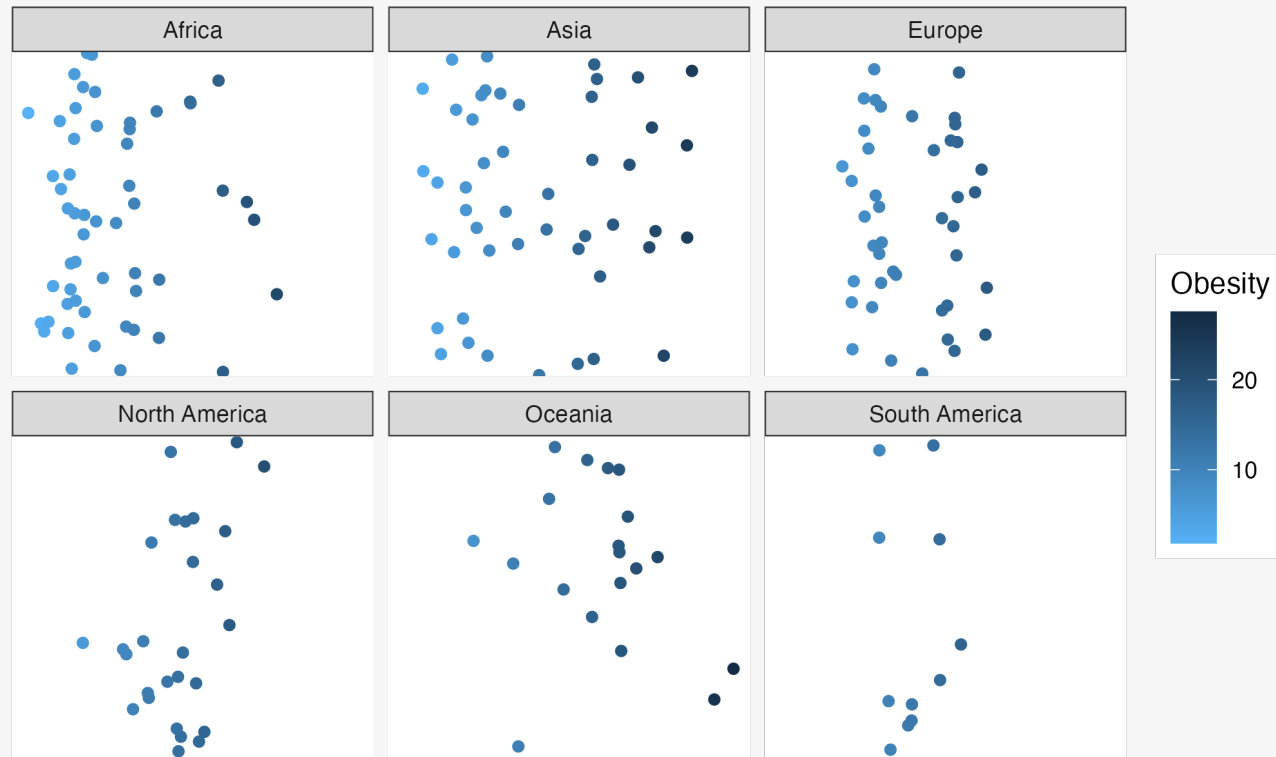


Data source: OECD health data

Overweight & obesity
in countries grouped
by continents



Figure C2: Percentage of deaths attributed to obesity
for 201 countries grouped by continents (year 2019)



Data source: <https://ourworldindata.org/obesity>

Deaths attributed to
obesity in countries
grouped by continents

