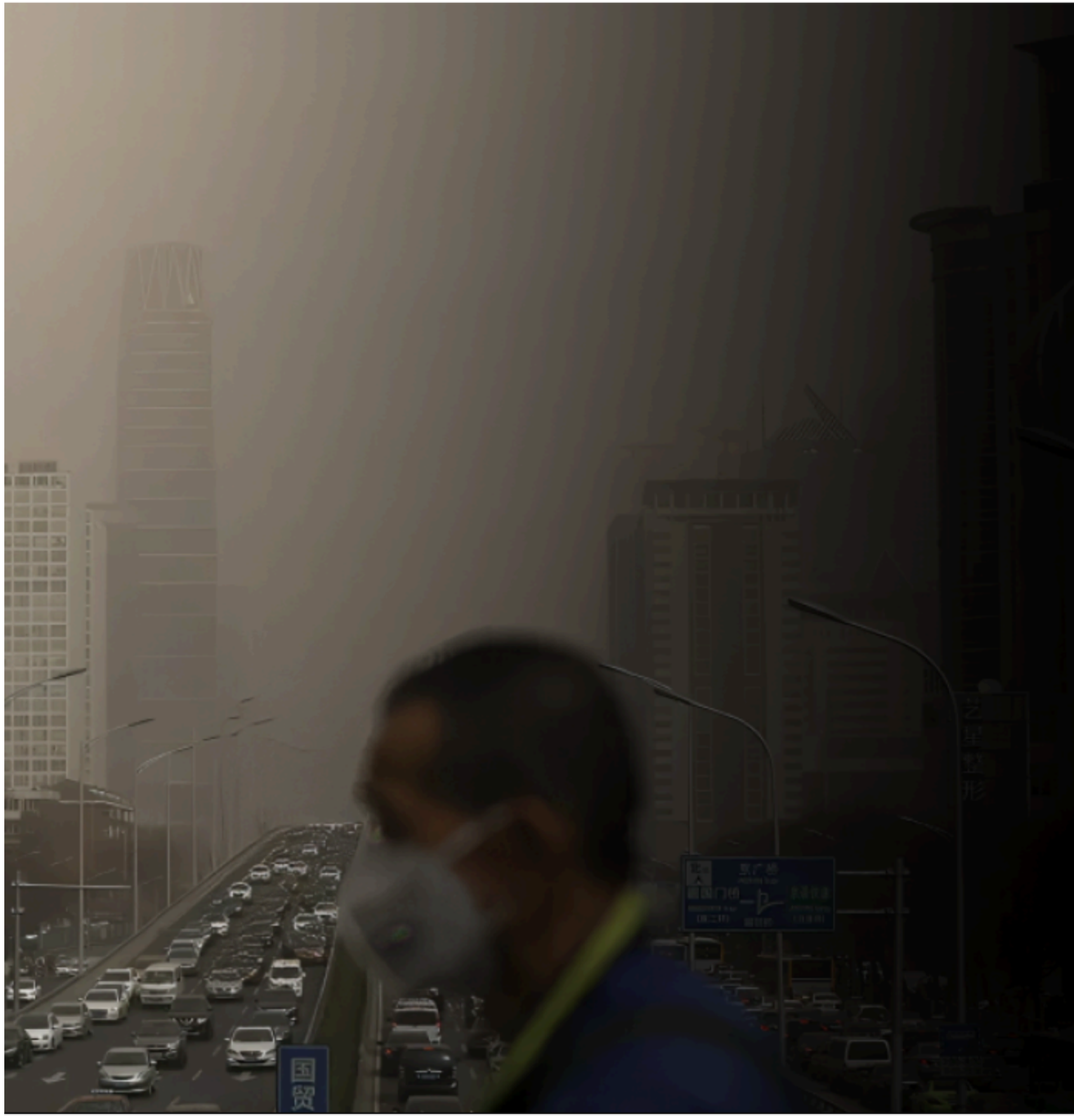

Air Pollution & Health Impact Analysis

Team Members

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Course Title: *Data Analyst Specialist*
Instructor: *Eng. Menna Selim*

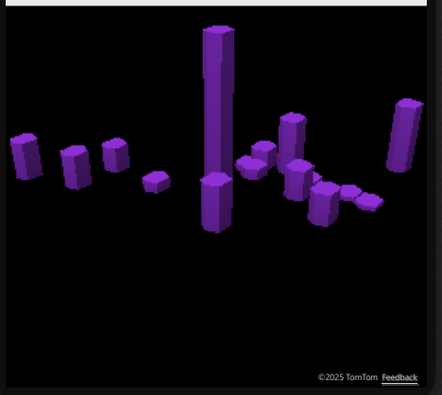
-0.7%
Average of YOY change

13.73M
Total deaths

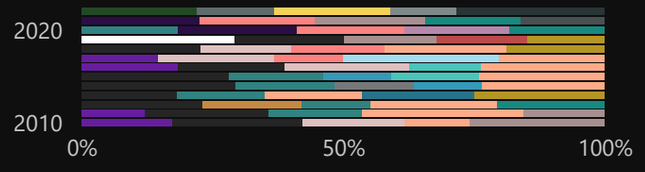
12.33
Average of pm25_con

pm25 concentration by year

Total deaths by country



Avg pm25 by year and country name



Top 4 pollution rank by country name

6.94K
Average of yearly correlation index

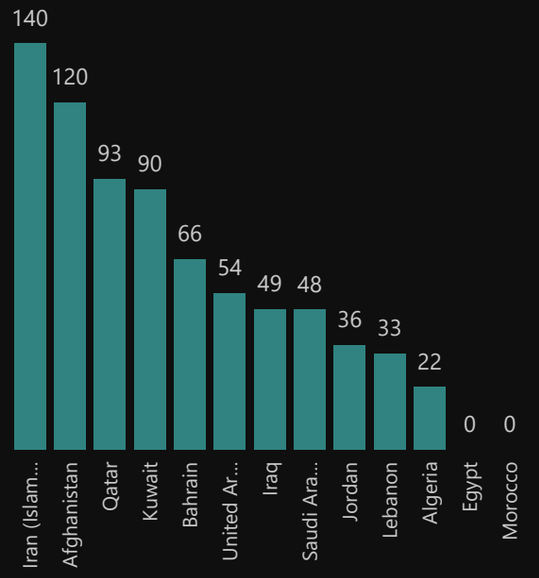
140.00
Max of pm25

581653.5%
Average of YOY change deaths

Category of CUR & PREV in year for each country

country_name	category	prev_category	year
Albania	Low	Moderate	2019
Albania	Moderate	Low	2018
Bosnia and Herzegovina	Low	Moderate	2021
Chile	Low	Moderate	2018
Chile	Moderate	Low	2019
China	Moderate	High	2020
Costa Rica	Low	Moderate	2017
Costa Rica	Moderate	Low	2015
Cyprus	Low	Moderate	2016
El Salvador	High	Moderate	2012
El Salvador	Moderate	High	2015

Max pm25 by country



Top 5 most total deaths countries

country
Egypt
Iran (Islamic Republic of)
Iraq
Morocco
Saudi Arabia

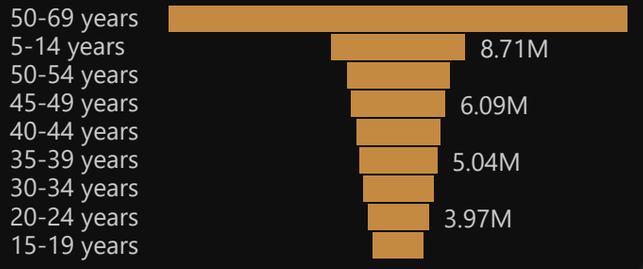
6.94K
Average of yearly correlation index

140.00
Max of pm25

581653.5%
Average of YOY change deaths

Improvement amount by country name

Total deaths by age



Yearly correlation index by year

Air Pollution & Health Impact Analysis

*This report presents the design and development of an interactive **Power BI dashboard** that analyzes global air pollution trends and their relationship with health outcomes.*
*Using cleaned by **Python** datasets for PM2.5 concentration and mortality statistics,*
*we built analytical **SQL** queries and visualizations that explore:*

- *Year-to-year changes in pollution for each country*
- *Long-term pollution trends using rolling averages*
- *Death statistics and trends across countries*
- *Correlation indicators between PM2.5 and mortality*
- *Country rankings for pollution and health impact*
- *Risk classifications and percentile distributions*
- *Population-weighted pollution risk assessment*
- *Identification of high-risk countries and improvement patterns*

The dashboard offers a comprehensive, data-driven understanding of how air quality changes over time and how it relates to public health.

THANK YOU...:)

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