

Visualization of the dependence of the occurrence of oncological diseases on the level of development of the country due to CO2 emissions



Rystin Asset
Toleutay Aldiyar
Zhakipbayev Almas

Why this is important?

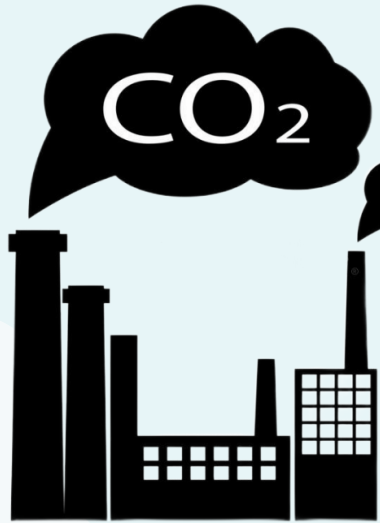
In the current technogenic world, the problem of ecology is closely related to the life of people, specifically with health and the emergence of new diseases. Today we can compare the level of development of countries by such a key indicator as GDP, thereby saying that this is an indirect indicator of a well-functioning manufactory.

However, the excess of some production has been and will continue to be carbon dioxide (CO₂) pollution, which is a carcinogen that can cause cancer.

The relevance of the topic is to identify the appearance of cancer in the future by predicting future CO₂ emissions and visualizing them. This visualization will help to prevent the appearance of oncological diseases.



Research hypothesis



H1



The incidence of cancer is lower in countries where urbanization is low because people live away from places of CO2 emissions

H2



Country's GDP has direct correlation with the indicator of dioxide (CO2) pollution



Chosen Datasets

1) GPD

2) CO2 emissions

3) Total cancer deaths by type

	Country Name	country_code	Region	Indicator Name_x	1990_x	1991_x	1992_x	1993_x	1994_x	1995_x	...	2012_y	2013_y	2014_y	2015_y	2016_y
0	Afghanistan	AFG	South Asia	CO2 emissions (metric tons per capita)	0.191745	0.167682	0.095958	0.084721	0.075546	0.068468	...	12.752287	5.600745	2.724543	1.451315	2.260314
1	Angola	AGO	Sub-Saharan Africa	CO2 emissions (metric tons per capita)	0.553662	0.544539	0.543557	0.708984	0.836804	0.912141	...	8.542188	4.954545	4.822628	0.943572	-2.580050
2	Albania	ALB	Europe & Central Asia	CO2 emissions (metric tons per capita)	1.819542	1.242810	0.683700	0.638307	0.645355	0.605436	...	1.417526	1.001987	1.774487	2.218752	3.314805
3	Andorra	AND	Europe & Central Asia	CO2 emissions (metric tons per capita)	7.521832	7.235379	6.963079	6.724178	6.541579	6.733479	...	-4.974444	-3.547597	2.504466	1.434140	3.709678
4	United Arab Emirates	ARE	Middle East & North Africa	CO2 emissions (metric tons per capita)	30.195189	31.778496	29.080926	29.275678	30.849333	31.125018	...	4.484626	5.053346	4.284304	5.105937	3.060964
...
178	Samoa	WSM	East Asia & Pacific	CO2 emissions (metric tons per capita)	0.552836	0.609756	0.604266	0.658221	0.592807	0.705675	...	-4.088724	-0.418844	0.078245	4.272189	8.054160
179	Yemen, Rep.	YEM	Middle East & North Africa	CO2 emissions (metric tons per capita)	0.567037	0.690937	0.704793	0.627105	0.653256	0.706081	...	2.392886	4.823415	-0.188574	-27.994546	-9.375124

**Thank you for
your attention!**

