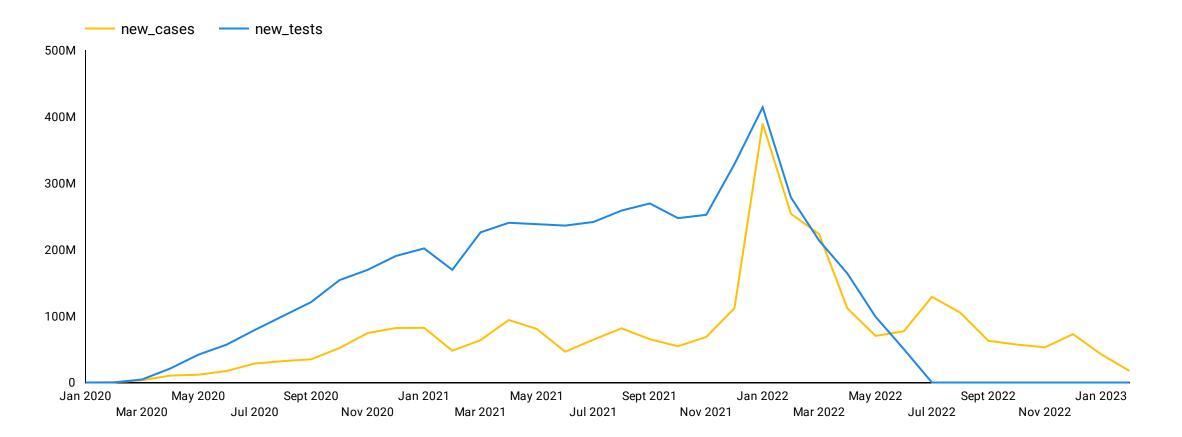
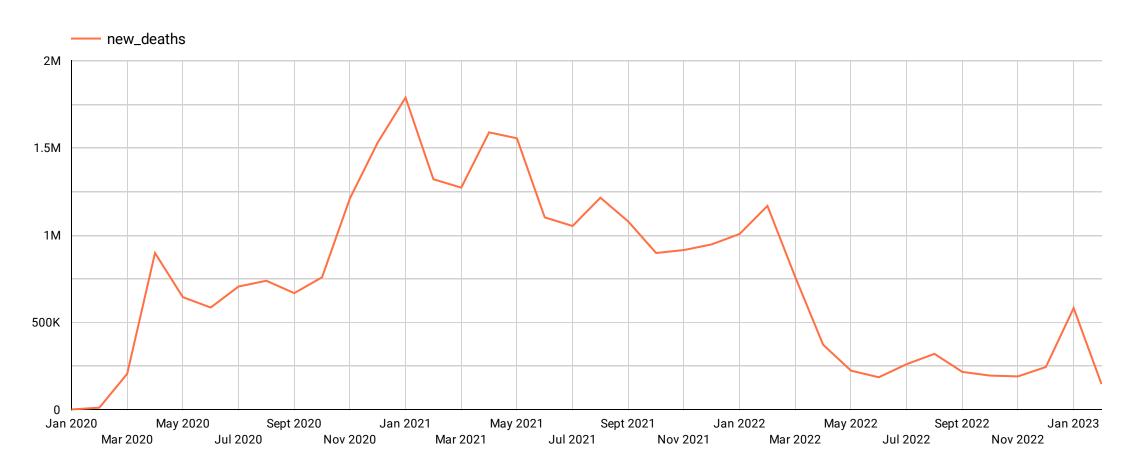
Covid-19 Fight Overall

New Case & New tests time series



<u>January 2022</u> new cases peak: New Years Eve Celebration effect & tests peak (see blue line) + Omicron variant --> <u>for details</u>

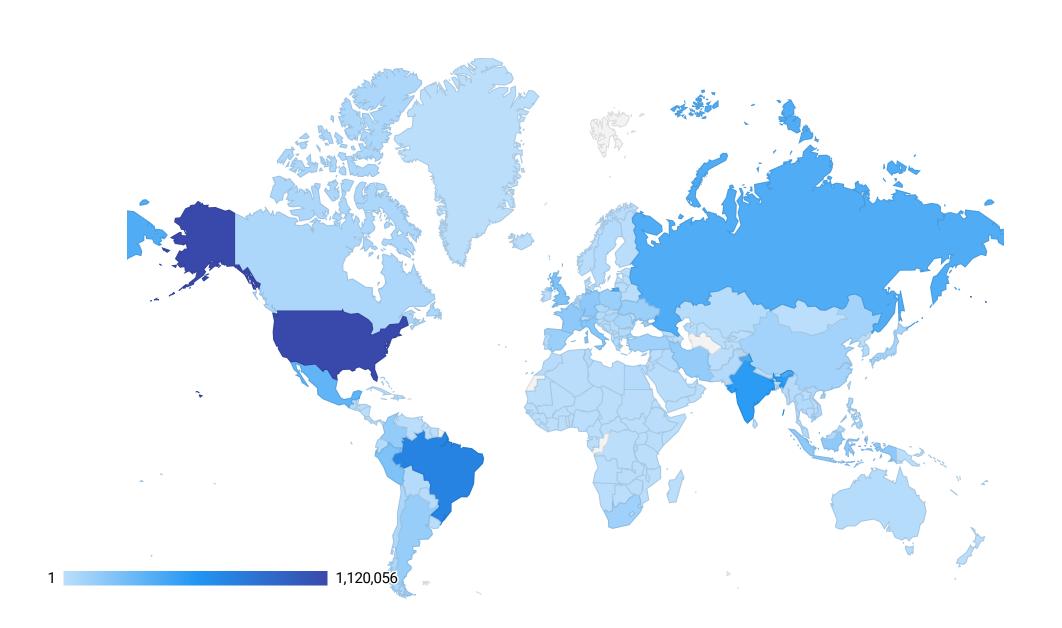
New deaths time series



Winter effect: in january and february of each year considered (2021, 2022, 2023) we can see a peak in new deaths, beacuse of a seasonality reason. The winter normal flu could cause worst covid effects, especially for fragile individuals

January 2021 focus as worst month: <u>link</u>

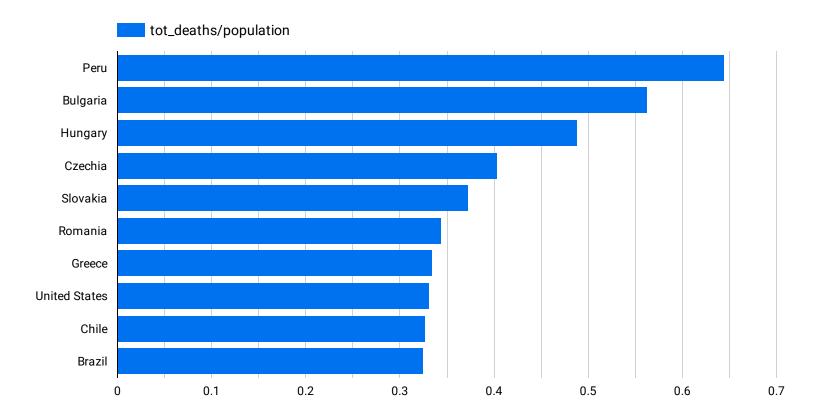
Total deaths by Country



It seems that Afica has not been too much affected by Covid. Actually there is a problem of accuracy of data. <u>Only one in seven cases are correctly reported</u>

Most affected Countries by Covid

List of countries with the higher rate between deaths and population (population > 5ML)

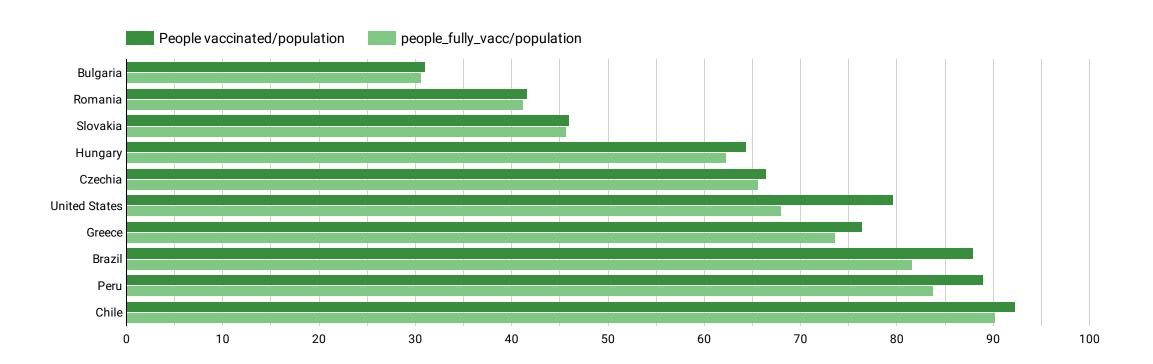




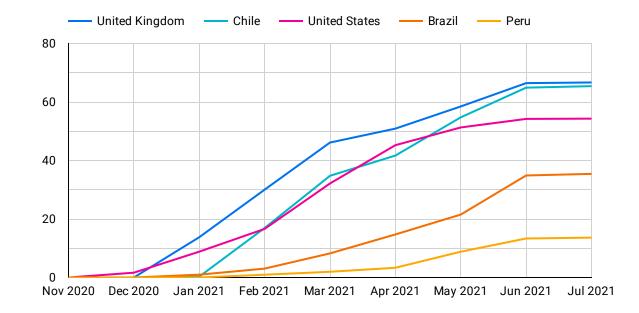
Some Observations

Vaccination Analysis

Some of the Countries of the previous list has a very low vaccination rate. Especially we can see that there is a <u>very low rate in the East European Area</u>, also nowadays after 3 years of Covid. In fact in this countries there is an aversion in front of vaccination, especially for historical and political reason - <u>here is an article to focus on this problem</u>



Analyzing the period between the end of 2020 and the summer of 2021, when the vaccination started, we can see that the other countries in the initial list did not had a good vaccination rate, in comparison to United Kingdom that was one of the most performing countries in the vaccination campaign. The only exception in this analysis is Chile, as you can see.



Analysis for Macroareas & single Countries

In the initial list we can group the countries in 2 macroareas, East European Countries and South America Countries. Out of this group there are 2 other Countries: Greece and United States. Let's analyze this 4 points.

East European countries: we have already seen that one of the reason for this countries that made Covid very effective was the low vaccination rate. There are some other factors? <u>Here is a link to focus on</u>

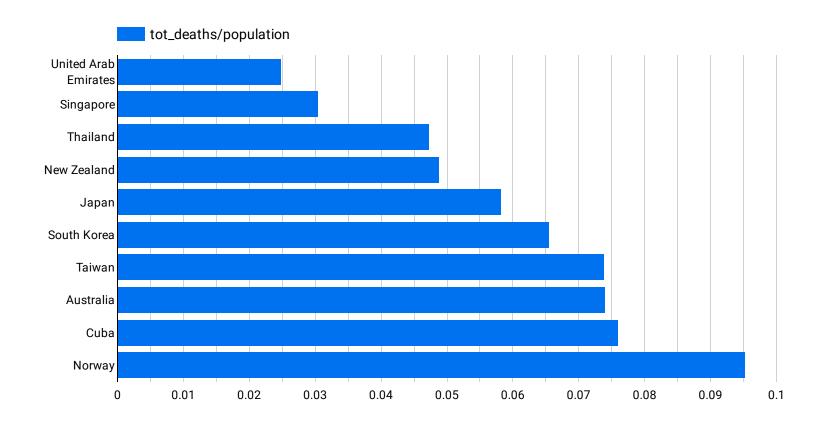
South America countries: we have seen that also in this area the campaign for vaccination started later in comparison to other countries. Also for this area there are some other reasons such as health services, economic condition, population density and also political reason. <u>To focus on click here.</u>

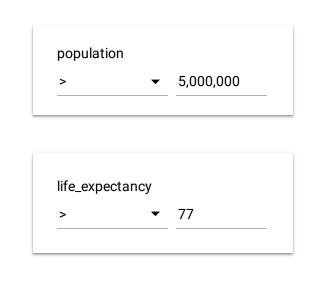
United States: in United States there were a lot of reasons, for example: the political strategy (less restrictions especially at the beginning), the particular sanitary system ecc. <u>Here is an interesting article</u> made at the beginning of the pandemic explosion that analyzed some risks for United States

Greece: it could be the strangest Country in the list. <u>In this focus</u> we can see some reasons, such as wrong containment measures and wrong vaccination campaign

Less affected countries by Covid

List of countries with the lowest death/population rate (Pop. > 5ML & Life Expect. > 77)





Some Observations

Vaccination Analysis

location	People vaccinated/population
United Arab Emirates	105.83
Cuba	95.68
Portugal	95.21
Hong Kong	92.32
Chile	92.27
Singapore	91.55
Taiwan	91.52
Canada	90.4
Costa Rica	88.89
Spain	86.93
South Korea	86.55

Most of the countries of the previous are in the chart of "Most vaccinated countries" (UAE, Cuba, Singapore, Taiwan are in the Top 10)

Tests Analysis

	date (Yea	r) / tests_per_case
location	2020	2021
Australia	478,236.9	1,006,080.3
Taiwan	126,310.6	446,549.1
United Arab Emi	104,020.4	316,132.7
Thailand	312,995.6	15,781.1
Hong Kong	22,894.9	191,736.1
Austria	-	188,391.5
Denmark	55,755.7	53,126.1
South Korea	62,173.8	36,320.7

Other performing countries adobted an accurated Tests campaign to fight the diffusion. In this case we can see that in first positions there are countries like Australia, Taiwan, Hong Kong, Thailand.

Population Density reason

location	population_density
Taiwan	-
Australia	3.2
Canada	4.04
Norway	14.46
Finland	18.14
New Zealand	18.21
Chile	24.28
Sweden	24.72
United States	35.61
± · · ·	

In the end, some of the less affected countries had some "geographic and demographic help" in the fight to Covid. For example, Norway, New Zealand and Australia had very low density population