



Data Analysis and Visualization

DAV, ACCB4002



DAV, Assessment 1, Task 1

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Introduction:

In this module I learned how to analyse and visualise a given information, the essence of the statistics. In this assessment I am given two different tasks. In the first task I have given infographic for rising and falling Coronavirus cases worldwide. I should improve (if necessary) and explain the information provided. In the second task I must answer five questions related to the treatment of the patients in Wales Accident and Emergency Departments. My answers will be visualised in graphs in an A3 poster in different document.

Background of the infographic:

The infographic which I should analyse is in the below:

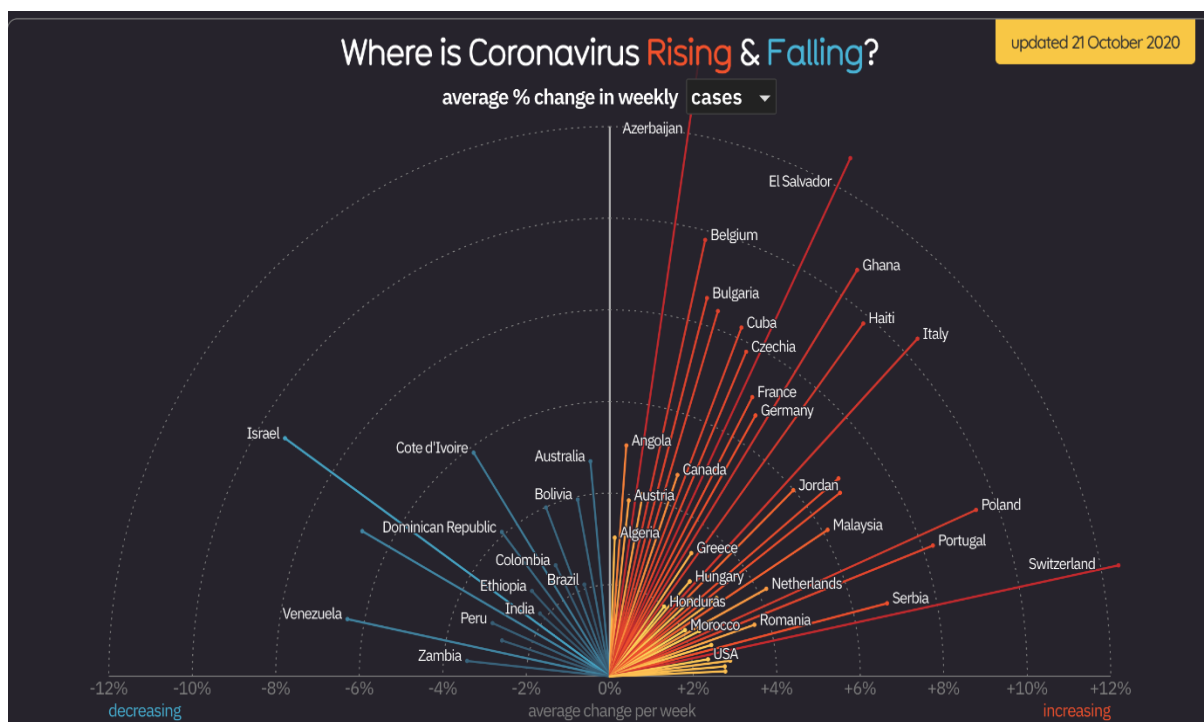


Fig.1

In the infographic, there are percentages that show the decreasing and increasing cases of Coronavirus in the world. At the side before the zero are decreasing cases. They are illustrated with blue colour. On the other side, after the zero are the cases in increasing cases. They are illustrated with yellow, orange, and red colour. With yellow colour are marked the cases with a smaller percentage. Orange colour is the average number of percentages and red colour are higher cases. I can see that there are more lines than the countries, for that reason, it looks a bit confusing and not easy to read it. Maybe this is because there is not enough space in the infographic. The font, font size, and font colour are good. In the infographic, I see that Israel is with a higher decline of cases a bit above - 9%. On second place almost with - 7% by decreasing cases I can see Dominican Republic. After that is Venezuela with - 6.5%, Cote d'Ivoire with -5.8%, Australia -4.7%, Columbia -4.1% and Bolivia is -4%. Below -4% are Zambia

with -3.6%, Peru is -3%. In the rest of the countries, I can see which they are: Brazil with -2.8%, India with -2.5% and Ethiopia with -2.3%. The last three countries are not easy to see exactly where they are in the graphic. On the increasing side, it is easy to see that Azerbaijan is with a higher percentage of growth of cases. Cannot tell how the percentage is but is much higher than +12%. El Salvador and Switzerland are also above +12%. Ghana is around +10.7%, Italy is +10.5%. Belgium and Haiti are in the same percentages around +9.8% followed by Poland +9.7%, Bulgaria +8.7%, Portugal, and Cuba around +8.2%. Below +8% and above the +6% is the countries Czechia, France, Germany, Serbia, Malaysia. Between +4% and +6% are Jordan, Angola, Canada, Netherland. With a small percentage are marked Austria with 3.9%, Romania with 3.7%, Greece with 3.2%, Algeria with 3.0%, Hungary with 2.8%, Honduras with 2.0%, Morocco and the USA are very hard percentages are difficult to determinate on the graphic. And still there are a lot of missing data and on both sides especially on the increasing side, this does not provide me the information which suggest presenting.

Good features, opportunities, and recommendation:

There are countries which are missing from the infographic as the United Kingdom, Russia, Turkey which are one of the leading in the number of infected by **BBC's** data [1] the USA is leading by number of infected followed by India and Brazil, but in the infographic India and Brazil are in the graph with decreasing cases and the USA is with a small percentage. On the top of the infographic, there is a date and information that percentage are change weekly. It is probable that on the given date these countries had these percentages. After my research, I found the source of the given infographic. It is **Information is beautiful** [2]. On the website it is easy to read the given information. Every line from the infographic after touch shows information as all these percentages are for growth or decline of the cases. However, the way in which it is presented without additional information is not easy for an ordinary viewer to understand or 'According to the Oxford English Dictionary [3], an infographic (or information graphic) is "a visual representation of information or data".'

'But the meaning of an infographic is something much more specific.

An infographic is a collection of imagery, charts, and minimal text that gives an easy-to-understand overview of a topic.'

[4]

That is why with the given data I can suggest another graph which can shows the information. It is much better to present the given data with another graphics than the infographic, because in that way the lines and the names of the countries gets too hard to read. Less information but with good presentation and easily readable for everyone is better graphics. With the graphics below the data is easier to read.

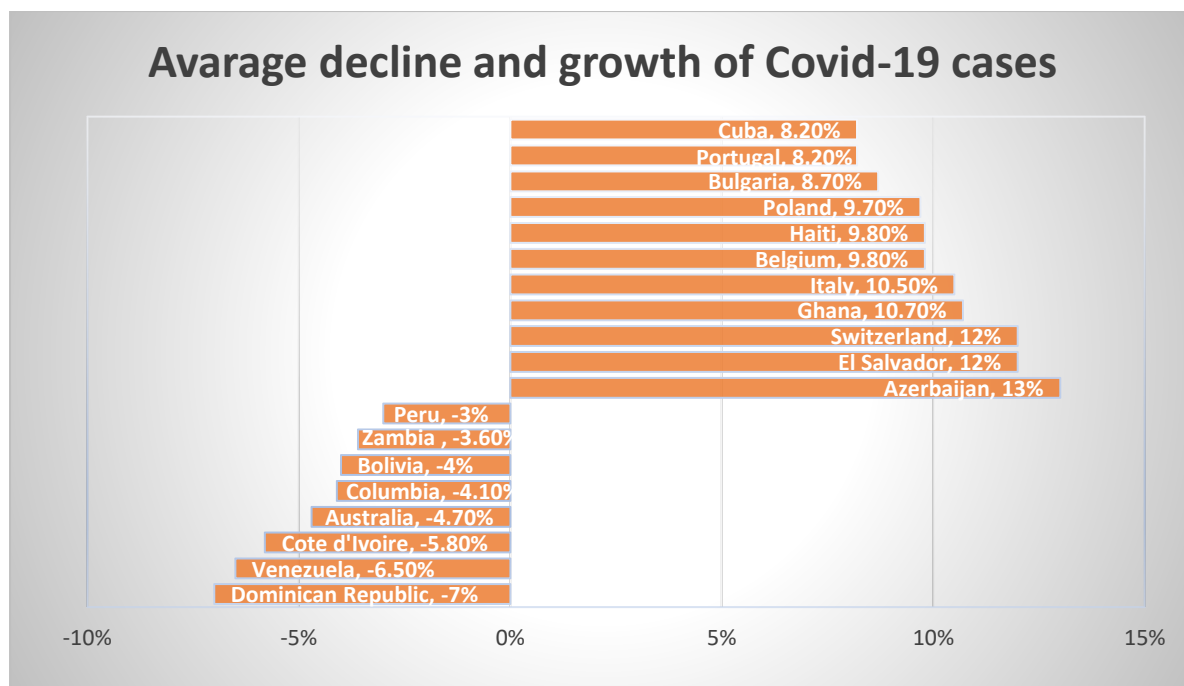


Fig. 2

The information on the Figure 2 shows not all the countries which are given in Figure 1 but most of them. On that graph are the leader countries of both sides taken from the original infographic.

References

- [1] B. T. V. a. D. J. Team, "Covid-19 pandemic: Tracking the global coronavirus outbreak," BBC, 2020.
- [2] J. H. University, "Where is Coronavirus rising and falling?," Information is beautiful, 2020.
- [3] Oxford, "uk dictionary," Lexico.com, 2021.
- [4] M. Nediger, Venngage, 2020.

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