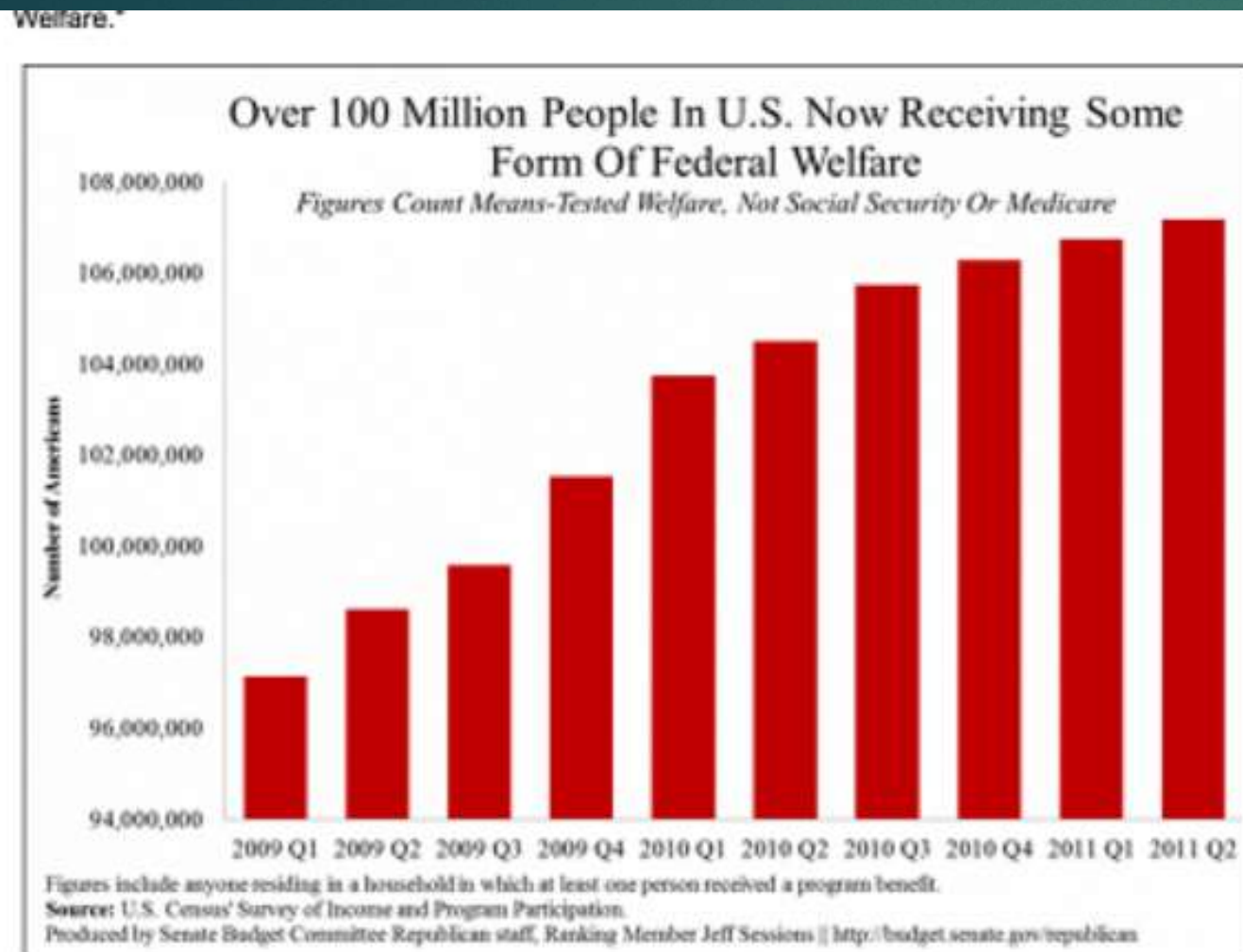


Data Visualization

MISLEADING VISUALS

Misleading axes

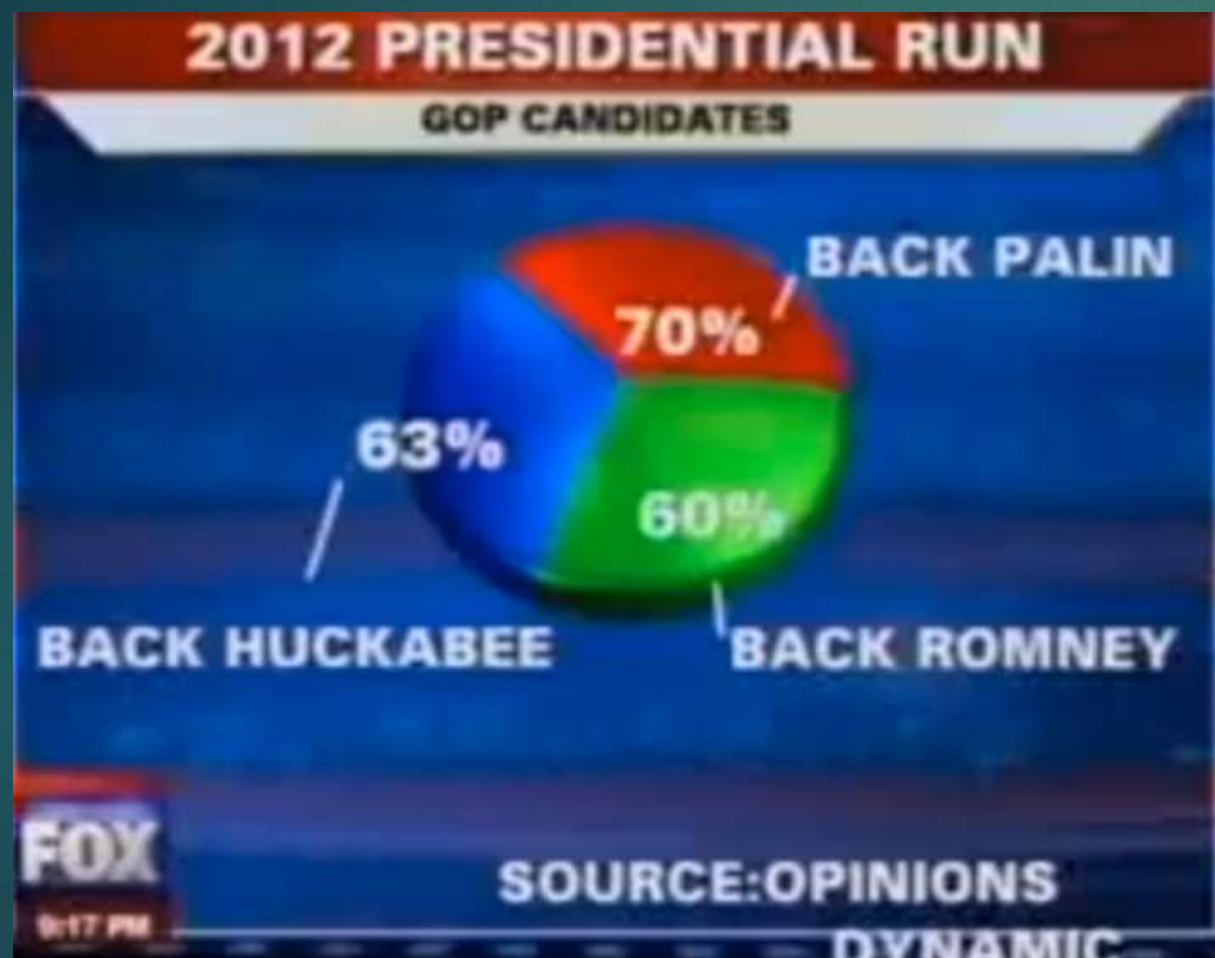
2



- ▶ It appears that the welfare problem is spiraling out of control.
- ▶ But note where the y-axis starts!

Wrong data

3

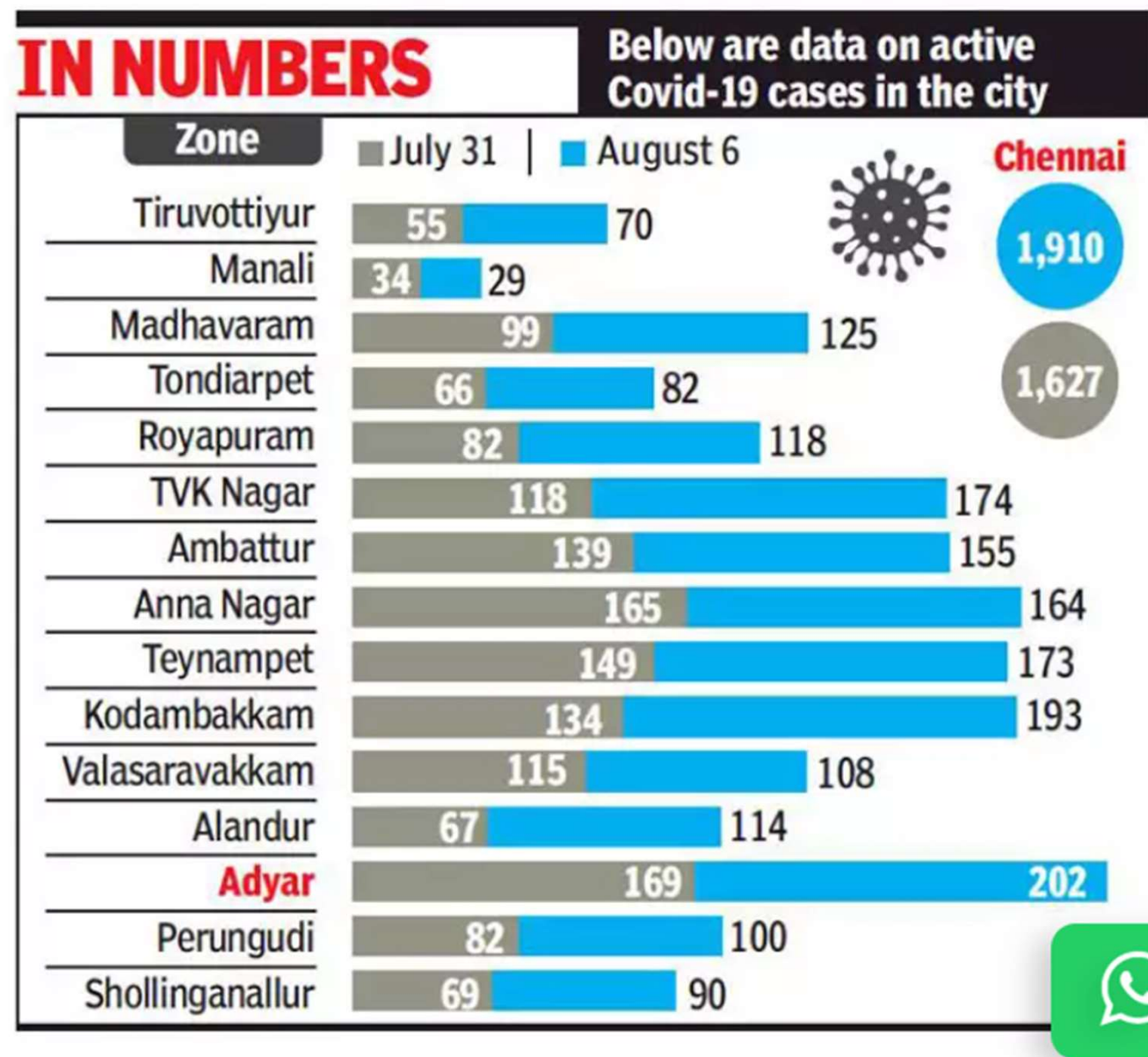


- The weights of the categories do not add up

<http://flowingdata.com/2009/11/26/fox-news-makes-the-best-pie-chart-ever/>

Inappropriate chart type

4

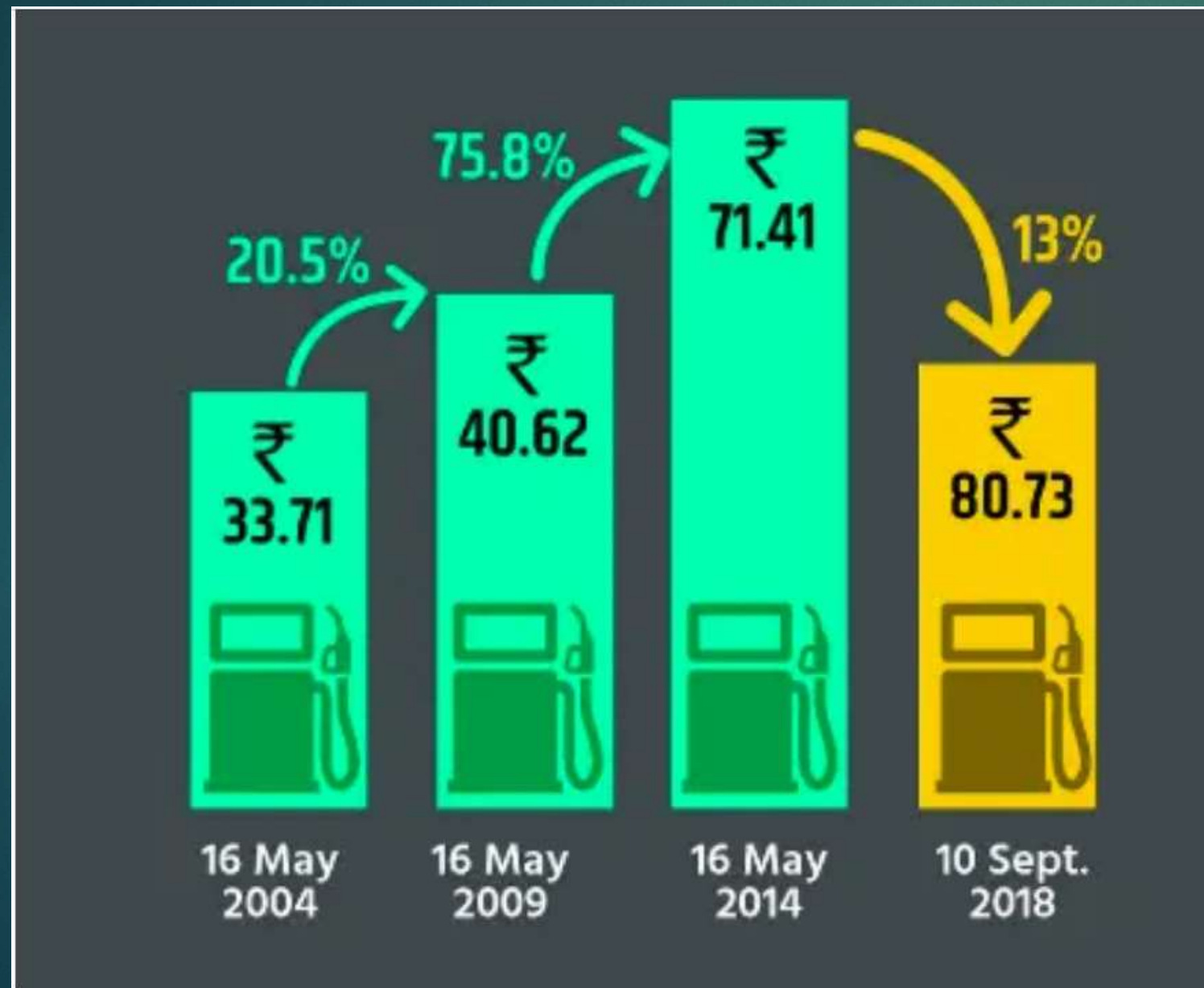


- ▶ It is difficult to compare the two datasets using the stacked bar chart.
- ▶ Bar chart with two series of columns would be better.

Incorrect bar chart

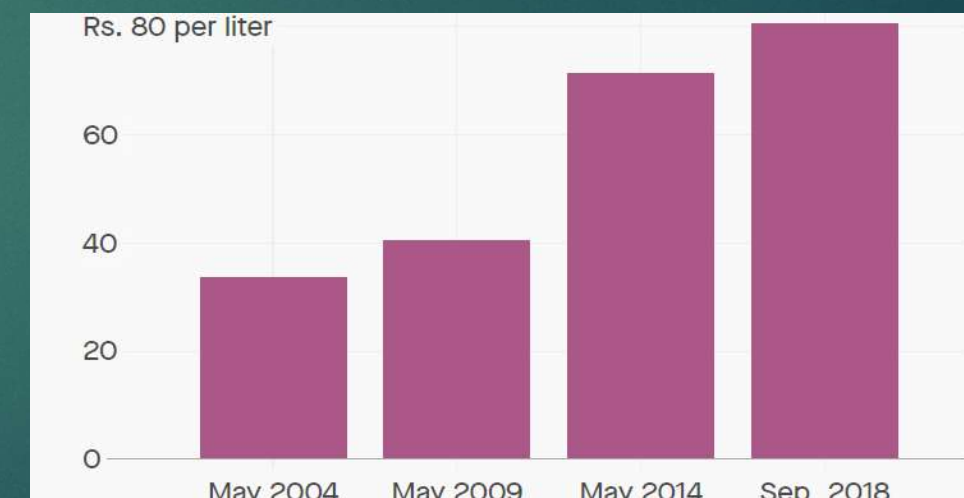
5

%increase in petrol prices



- ▶ An arrow points downward to Sept data point, however there is a positive change to the price.
- ▶ However, the %increase has reduced for Sept.

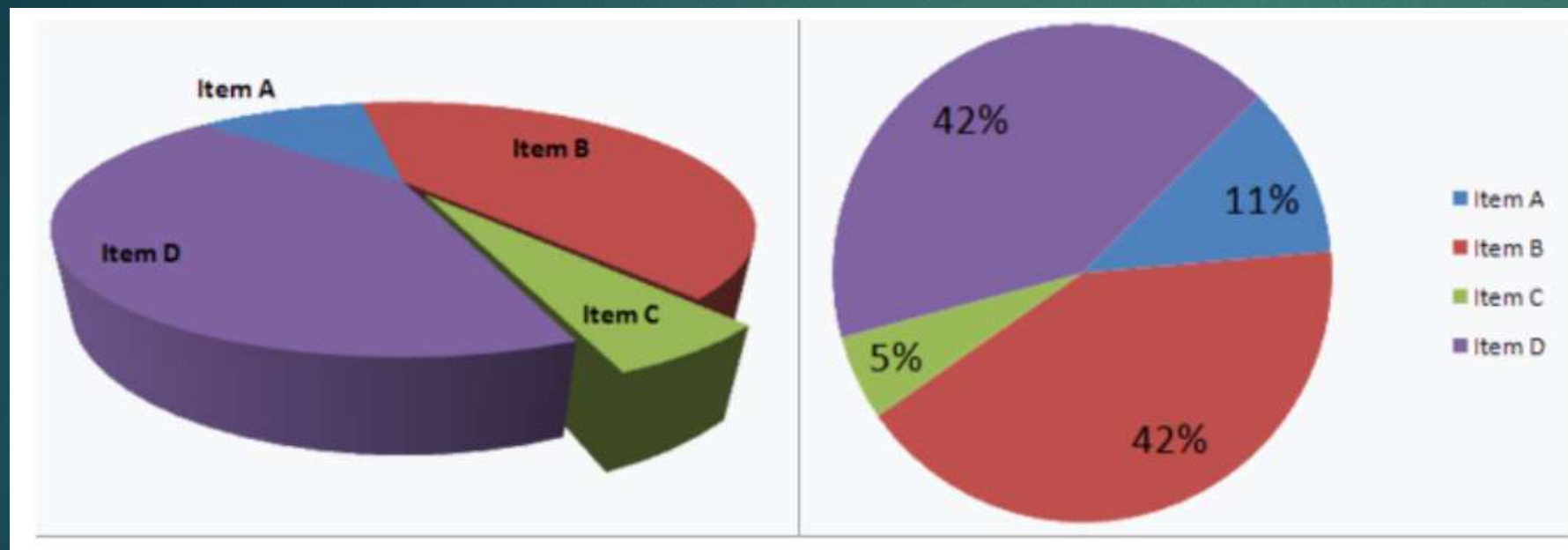
Accurate chart might be



<https://qz.com/india/1388030/indias-bjp-peddled-a-prime-example-of-chartjunk-to-its-millions-of-followers/>

Misleading 3D Pie Chart

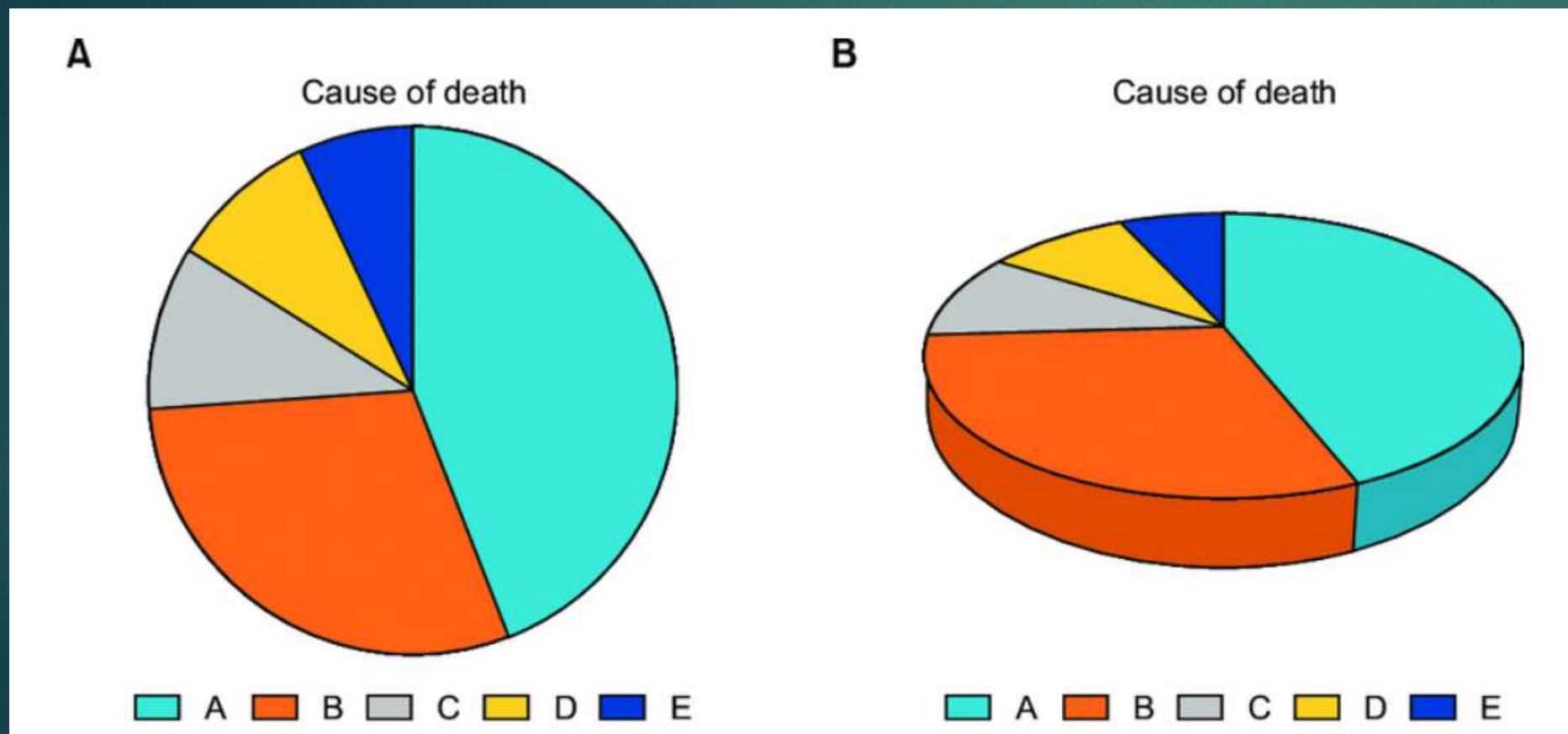
6



- ▶ The slices closer to you will appear larger than those further away.
- ▶ Compare Item A and Item C in both the graph

Misleading 3D Pie Chart..

7



► A and B look quite similar in the 3D graph!

In, J., & Lee, S. (2017). Statistical data presentation. *Korean journal of anesthesiology*, 70(3), 267.

Thank you

Tutorial 1.2

Creating a dashboard