Number and proportion of three major diseases in ten states

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1. Introduction

The top global causes of death (in order of total deaths) are related to three broad themes: cardiovascular disease (ischemic heart disease, stroke), respiratory disease (chronic obstructive pulmonary disease, lower respiratory tract infections), and neonatal disease - including birth asphyxia and birth trauma, neonatal sepsis and infections, and preterm birth complications.

In order to improve the way of life, it is important to know the cause of people's death. Measuring the number of deaths each year helps to assess the effectiveness of our health systems and direct resources to where they are most needed. For example, mortality data can help focus activities and allocate resources in sectors such as transport, food and agriculture, and environment and health.

This report wants to study the number and proportion of people with circulatory diseases, cancer (tumors), and respiratory diseases in each state.

2. Method

The report consists of a bar chart, a pie chart and a table. By default, the bar chart shows the total number of patients in each state. As the height of each bar chart, the pie chart shows the total percentage of three kinds of patients, and the table shows the total number and proportion of three kinds of patients.
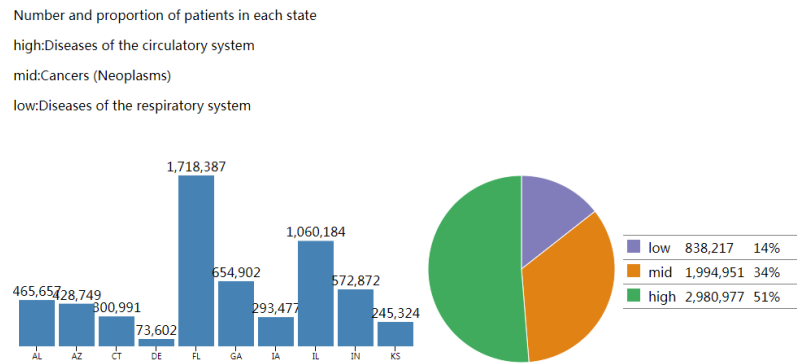
Figure 1

The first interaction is that when the user hovers over the bar chart of any state, the pie chart and table should be changed to show only the number and proportion of patients in that state.
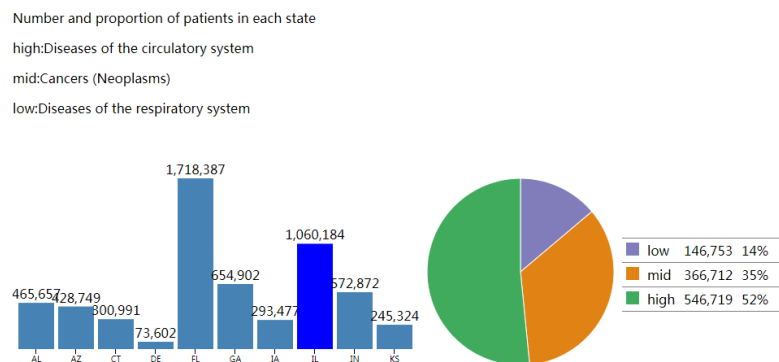

Figure 2 Hovering mouse over a bar modifies the pie chart and table

The second way to interact is that when the user hovers over a pie slice, the histogram changes, showing the number of states suffering from the disease by the type of disease selected, and the color of the bar chart changes to the color of the selected segment.
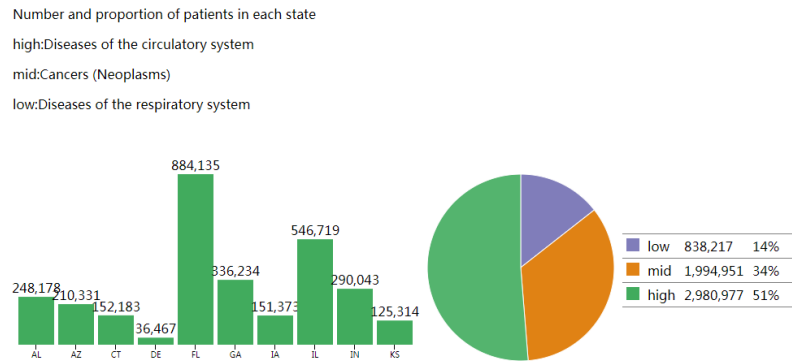
Number and proportion of patients in each state
high:Diseases of the circulatory system
mid:Cancers (Neoplasms)
low:Diseases of the respiratory system

low	838,217	14%
mid	1,994,951	34%
high	2,980,977	51%

Figure 3 Hovering mouse over a pie slice modifies the histogram

3. Result

The data were selected from the number of people suffering from circulatory diseases, cancer (tumors), and respiratory diseases in each of the ten U.S. states.

The number of people suffering from circulatory diseases in ten states is about fifty percent, the number of people suffering from cancer is about thirty-five percent, and the number of people suffering from respiratory diseases is about fifteen percent.

4. Discussion

Compared to the three major disease types that are the leading causes of death globally, cancer is not among the three major disease types in each state, and the other two circulatory diseases and respiratory diseases are the same as them.

5. Conclusion

Among the three types of diseases, circulatory diseases accounted for the largest number of people in each state, accounting for half of the total. Of the ten states, FL had the highest number of patients, IL had the second highest number, and DE had the lowest number. There was no significant difference between Al and AZ.

6. Reference

Data Source: CDC Wonder Data (Compressed Mortality)

https://www.infino.me/mortality/usmap

https://github.com/d3/d3/wiki/Gallery

world health organization