

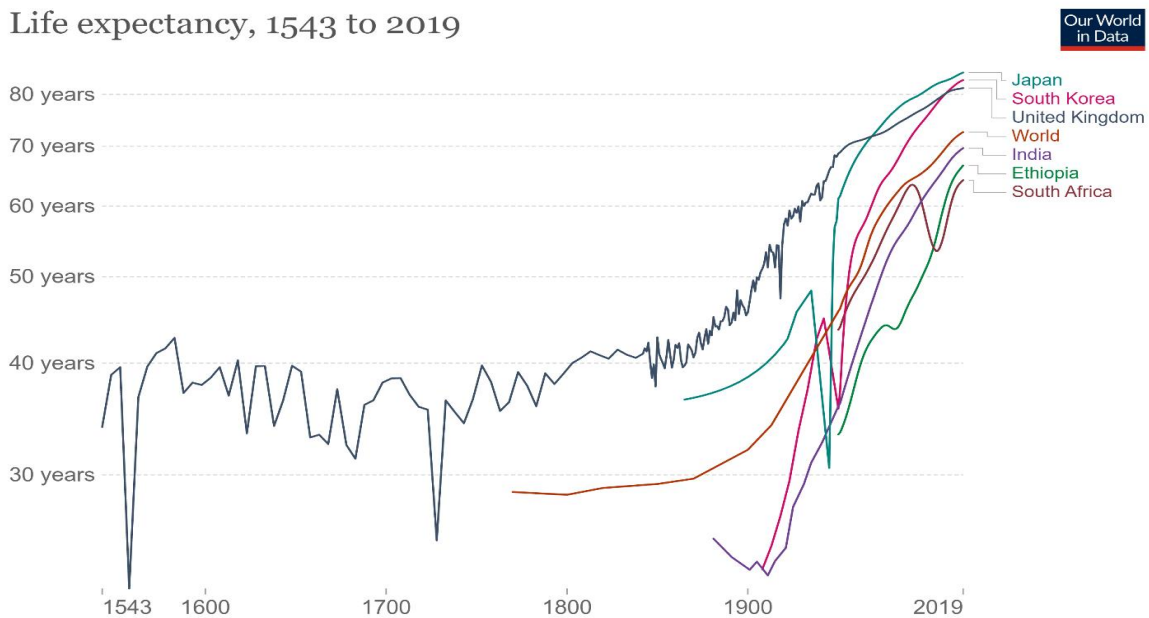
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### 1. Line Chart:

From Website:

Life expectancy, 1543 to 2019



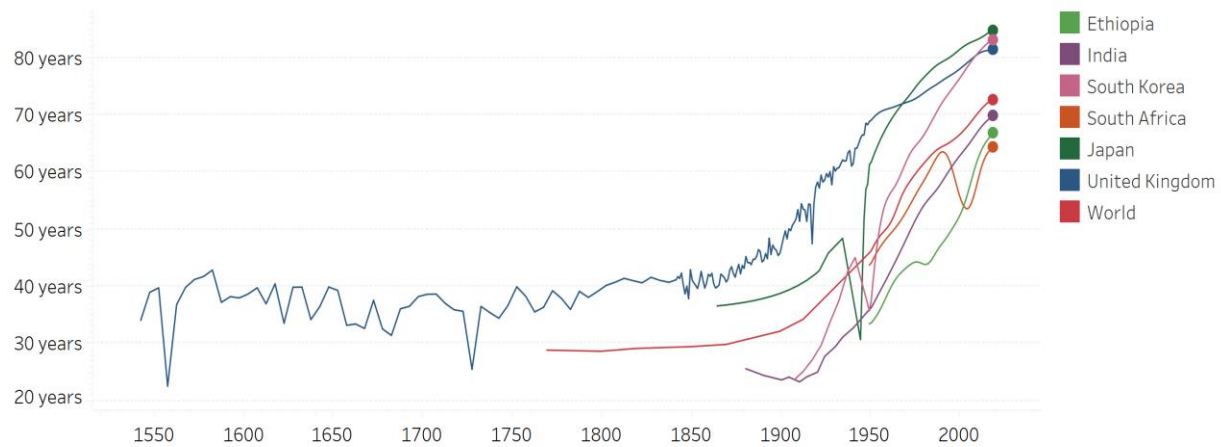
Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019)

Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

OurWorldInData.org/life-expectancy • CC BY

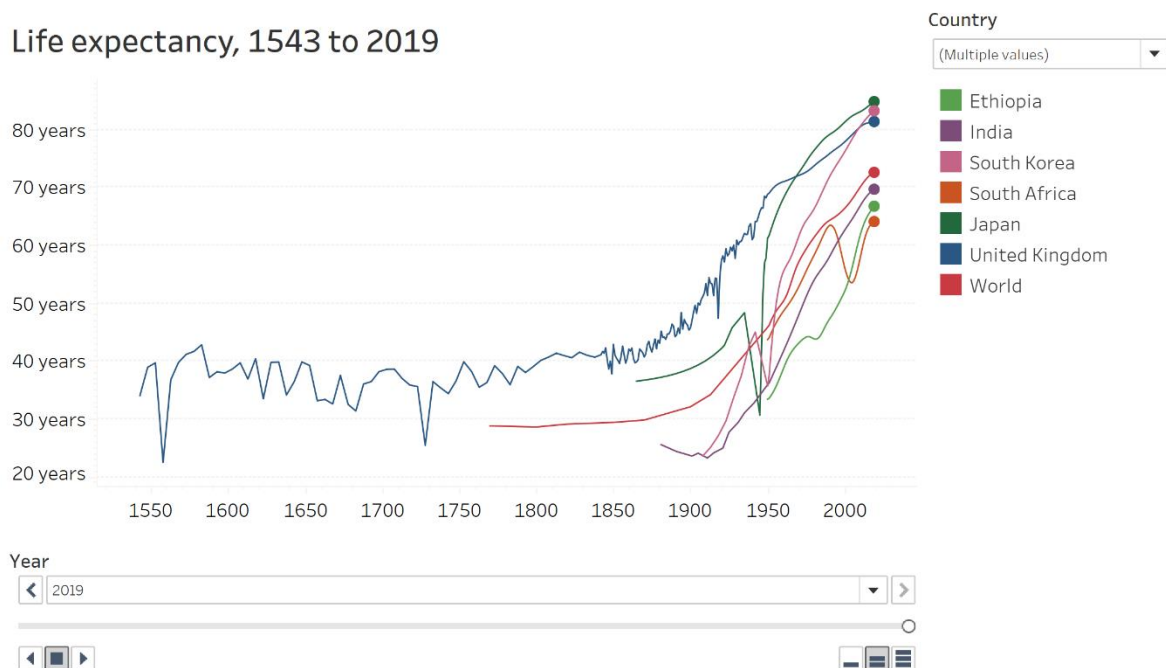
## My Visualization:

### Life expectancy, 1543 to 2019



Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

### Life expectancy, 1543 to 2019



Visualization shows the trend of life expectancy over the years. Over the last 200 years people in all countries in the world achieved impressive progress in health that lead to increases in life expectancy. From the graph we can see that in the UK, life expectancy doubled and is now higher than 80 years. In Japan it was the highest with close to 85 years. The line chart also shows how low life expectancy was in

some countries in the past: A century ago life expectancy in India and South Korea was as low as 23 years. A century later, life expectancy in India has almost tripled and in South Korea it has almost quadrupled.

The slider below the map is used to see the change over time also there is multiple values dropdown to click on any country to see the changing of life expectancy around the world.

In this graph I wanted to show a trend of life expectancy over the years which can only be best represented by a line plot as a line shows the change over a period most efficiently.

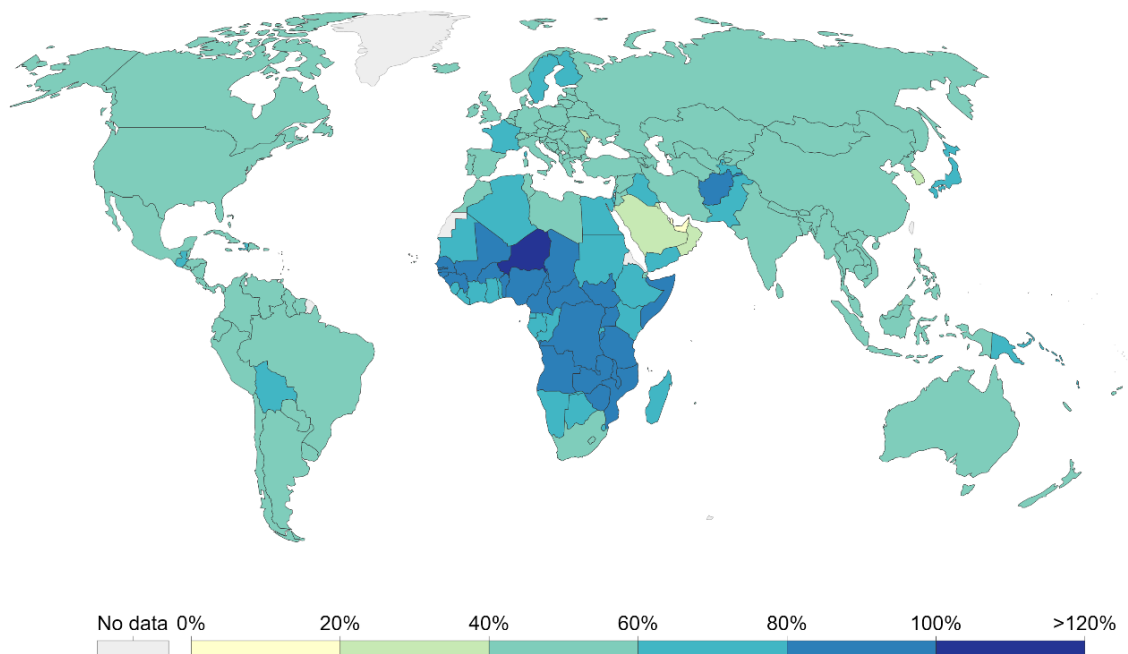
## 2. Maps:

From Website:

### Age dependency ratio, 2020

The age dependency ratio is the sum of the young population (under age 15) and elderly population (age 65 and over) relative to the working-age population (ages 15 to 64). Data are shown as the number of dependents per 100 working-age population.

Our World  
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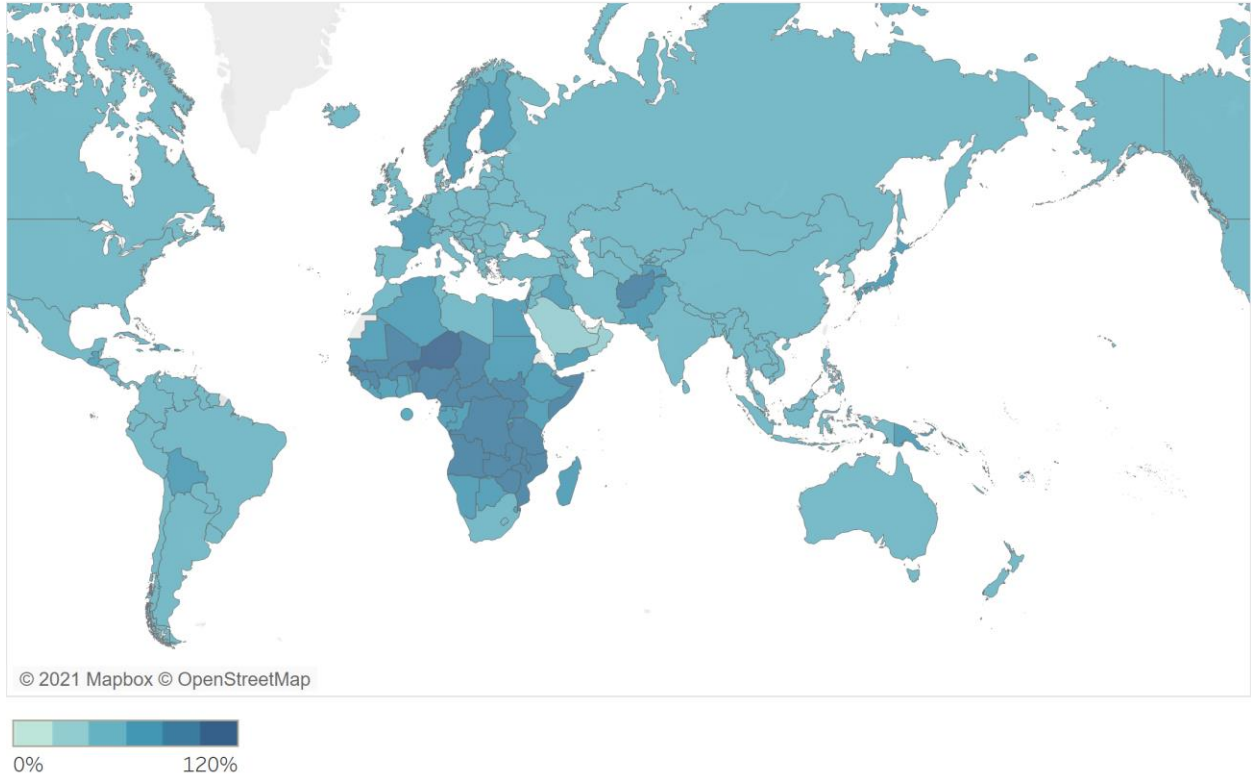
Source: World Bank based on data from the UN Population Division

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## My Visualizations:

### Age dependency ratio, 2020

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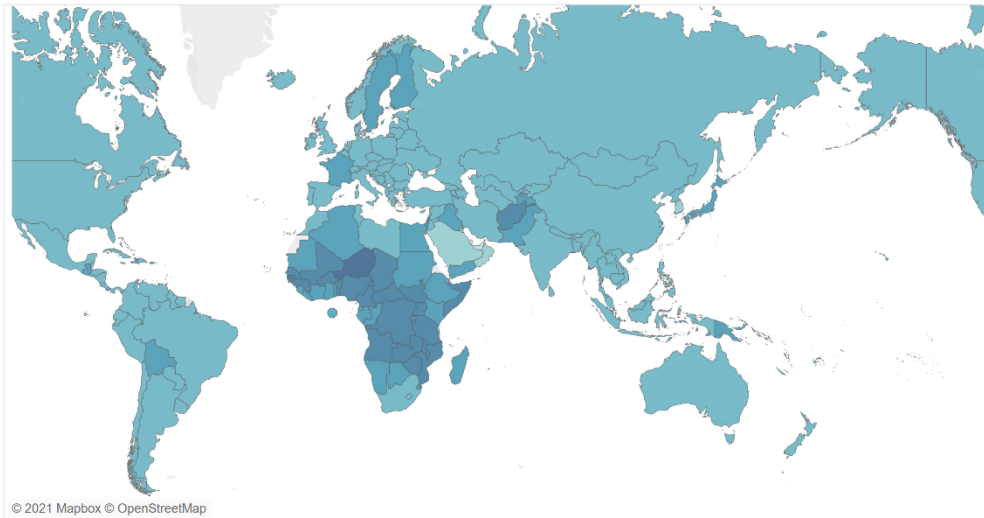


## Age dependency ratio, 2020

The age dependency ratio is the sum of the young population (under age 15) and elderly population (age 65 and over) relative to the working-age population (ages 15 to 64). Data are shown as the number of dependents per 100 working-age population.

Continent

(All)



0% 120%

Year

< 2020



This map visualizes the age dependency ratio across the world over the period of years. It's given as the number of dependents per 100 people of working-age. Working -age population is seen as essential to maintain economic and social stability and progress. And since a smaller share of the younger and older population is typically working these two groups are seen as 'dependents' in demographic descriptions. A value of 100% means that the number of dependents was the same as the number of people in the working-age population. A higher number means there are more 'dependents' relative to the working-age population; a lower number means fewer.

We see big differences across the world. Most countries have a 'dependent' population that is 50-60% the size of its working-age population. The ratio is much higher across many countries in Africa: Niger and Mali, for example, have a larger dependent population than they have working-age populations.

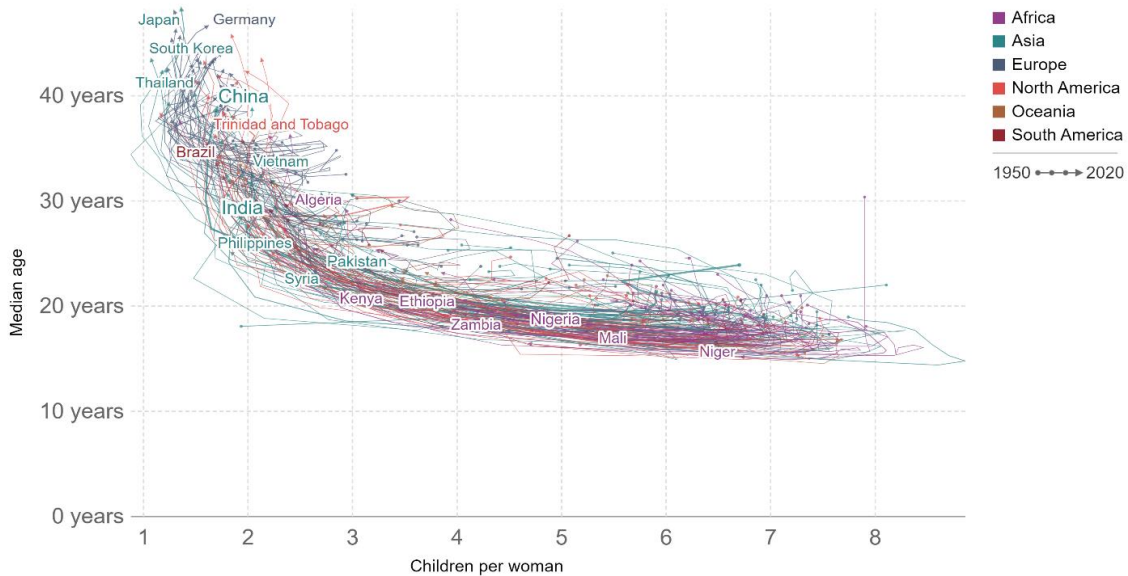
In this I used Map because it presents information about the world in a simple, visual way. Also I can compare the activity across several locations at a glance. From this visualization I can easily understand the age dependency ratio of all the countries at a glance.

### 3. Connected Scatterplot:

From Website:

#### Median age vs. children per woman

The median age divides the population in two parts of equal size: that is, there are as many persons with ages above the median as there are with ages below the median. Fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.



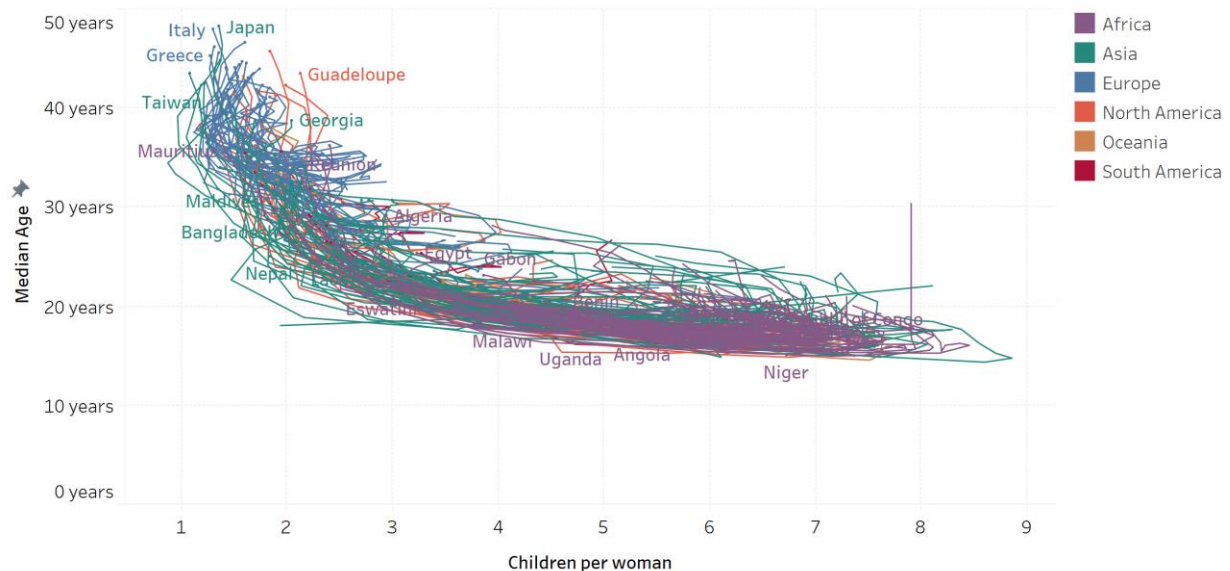
Source: UN Population Division (2019); World Bank

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#### My Visualizations:

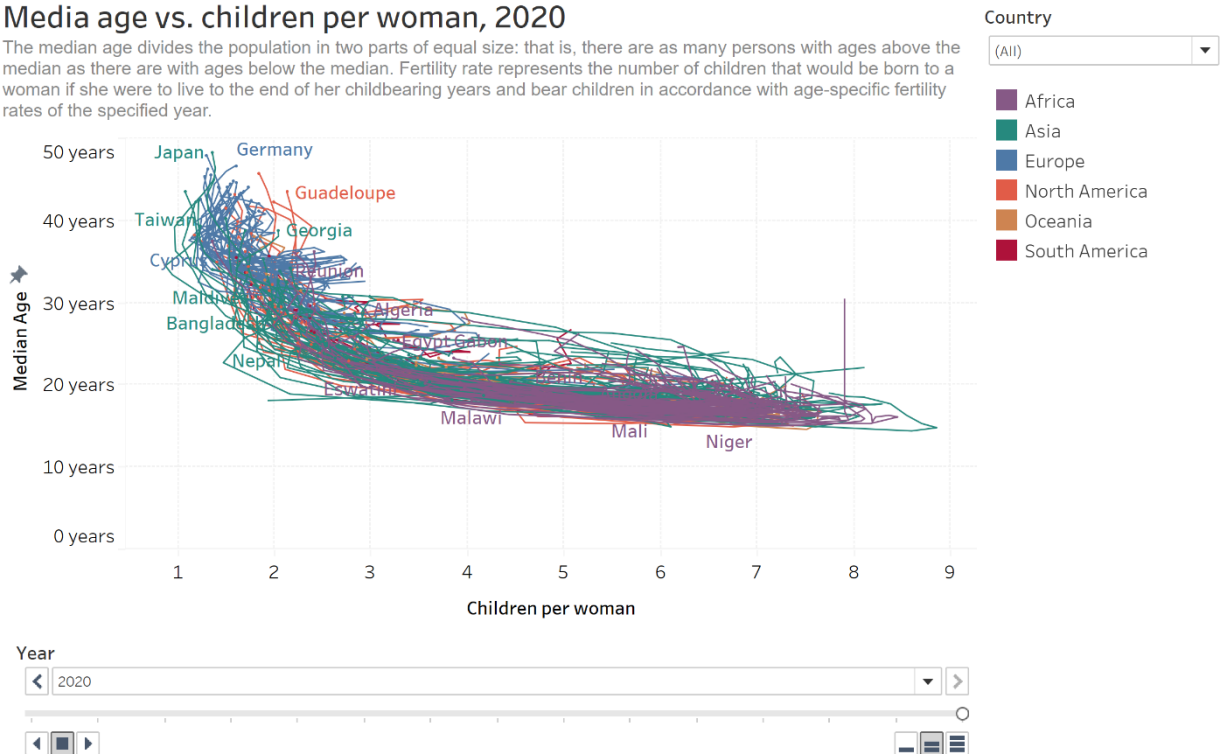
#### Media age vs. children per woman, 2020

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This plot visualizes the trend of Countries with median age according to the fertility rates. Fertility rate means the number of children that would be born to a woman in her childbearing age. From the visualization we can see that countries with lower median age tend to have higher fertility rate. Lower-income countries tend to have a lower median age. This is because they have a 'younger' population overall: high fertility rates across these countries mean they have larger populations of young children and adolescents.

Here connected scatter plot makes it easier to show non-linear method and see how the relationship changes over time. It helps determine the median age trend over the years for the specific country.

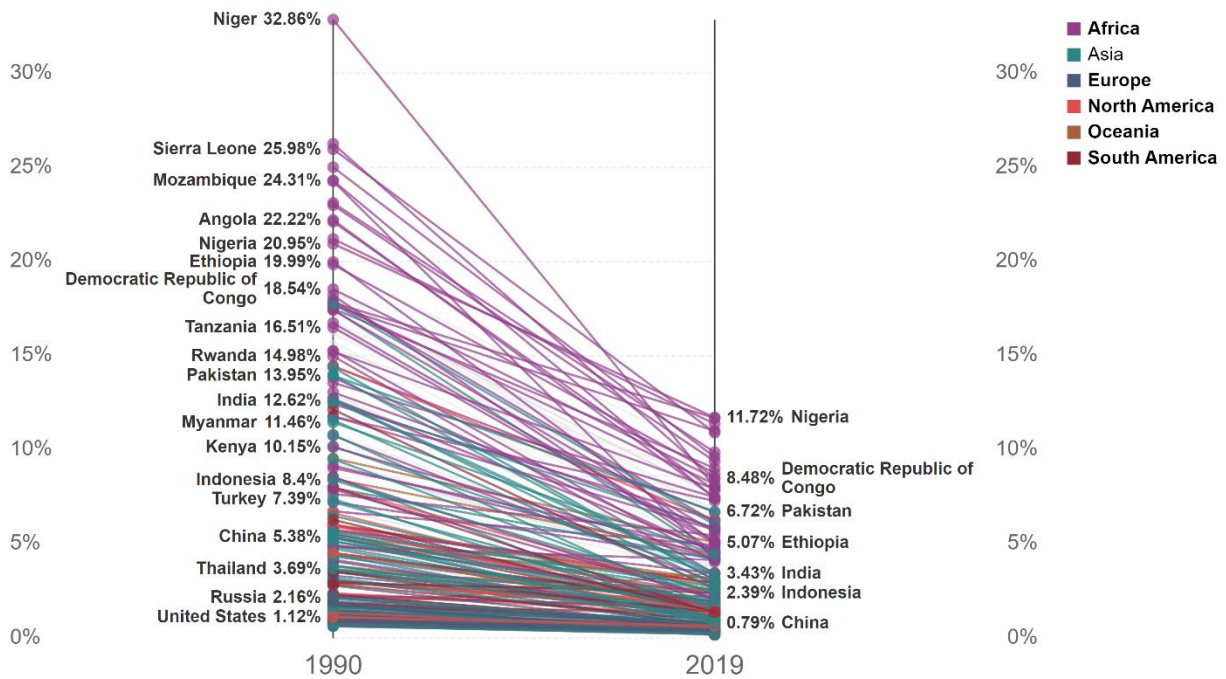


#### 4. Slope Chart:

From Website:

### Child mortality rate, 1990 to 2019

The child mortality rate is the share of children who die before reaching the age of five.



Source: UN Inter-agency Group for Child Mortality Estimation (via World Bank)

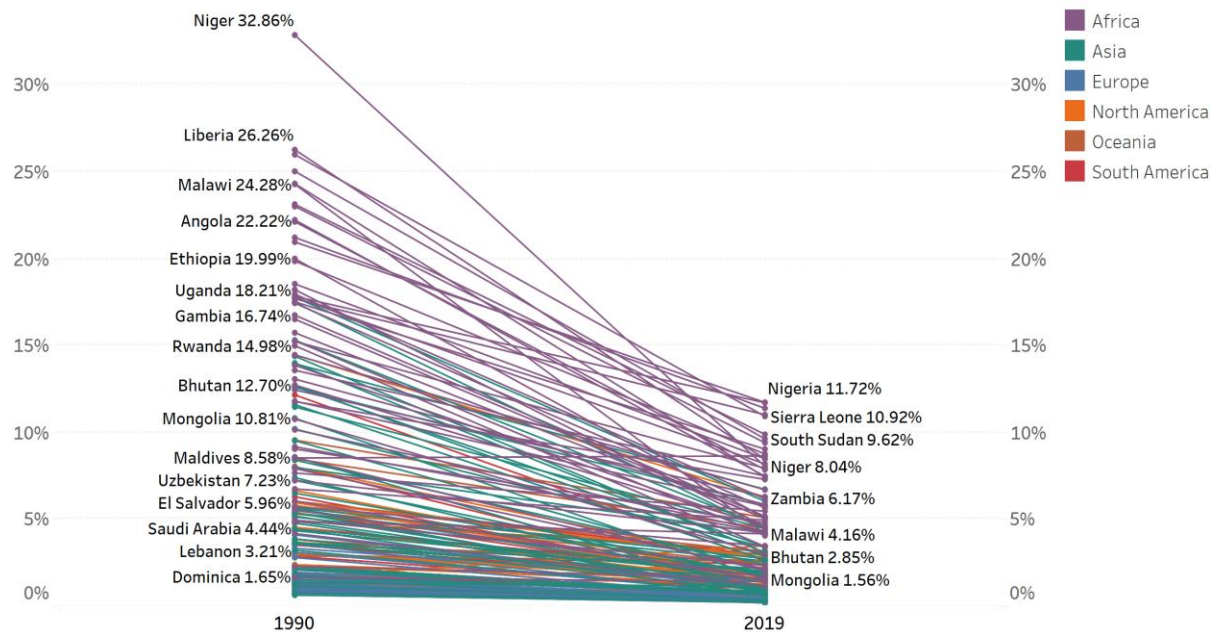
OurWorldInData.org/child-mortality • CC BY



## My Visualizations:

### Child mortality rate, 1990 to 2019

The child mortality rate is the share of children who die before reaching the age of five.



Slope charts are simple graphs that quickly and directly show transitions, changes over time and absolute values. It shows very easily what changes have occurred in the analyzed time interval. Here visualization clearly shows that there is a huge decline around the world from 1990 to 2019.

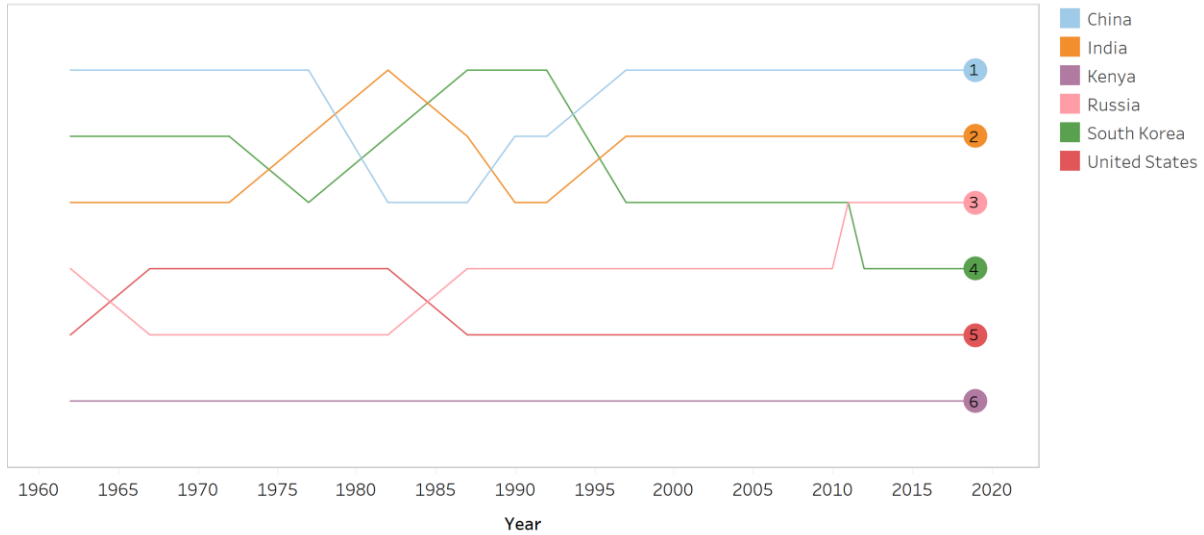
Child mortality measures the share of newborns who die before reaching the age of five. From the visualization we can see that child mortality today is the lowest it has ever been. In less than three decades child mortality has more than halved — from 12.5 million in 1990 to 5.2 million in 2019. But the visualization also shows that while the child mortality rate declined around the world there are still many countries in which the mortality rate is higher than 2.5%.

5. **Bump Chart:**

### My Visualizations:

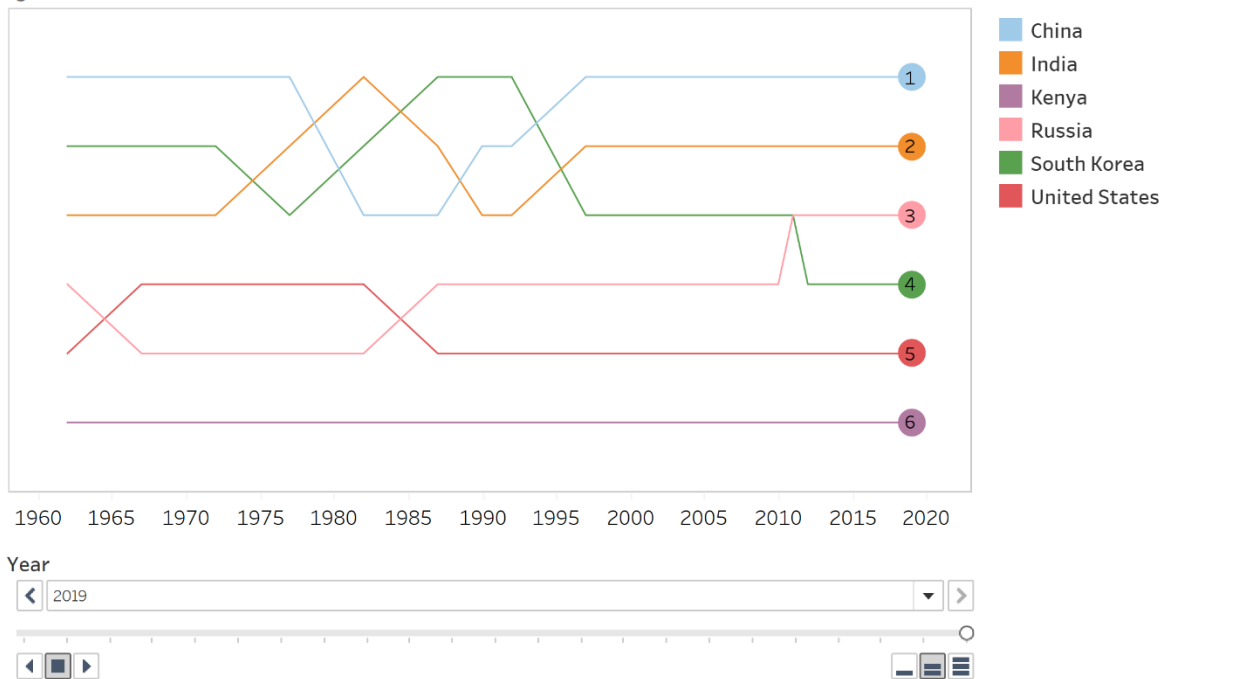
## Sex ratio at birth, 1962 to 2019

The sex ratio at birth is measured as the number of newborn boys for every 100 newborn girls.



## Sex ratio at birth, 1962 to 2019

The sex ratio at birth is measured as the number of newborn boys for every 100 newborn girls.



A Bump Chart is a special form of a line plot designed for exploring changes in rank over time. This chart helps compare the position/rank of countries rather than the actual values itself. In this the bump chart helps me to see the top countries having a greater number of newborn boys. This chart gives ranking over the period of years. So, we can see China has the highest sex ratio it dropped a bit in middle years, and it again gradually increased at stayed at position 1, while Kenya is having constant rank throughout.