- In May 2023, India recorded the highest number of Covid-19 cases, reaching 44,952,996 cases.
- The maximum number of Covid-19 deaths was also observed in May 2023, with a total of 531,564 deaths.
- Approximately 1.18% of the total cases in May 2023 resulted in death.
- The analysis of monthly data for the year 2023 revealed that both the highest case count and death toll occurred in the same month.

```
Query   Query History
1 ∨ select date,
2       location,
3       total_cases,
4       total_deaths,
5       (cast(total_deaths as double precision)/cast(total_cases as double precision)*100) as death_percentage
6   from covid_deaths
7   where location like '%India%'
8       and total_cases is not null
9       and total_deaths is not null
10  order by date asc;
```

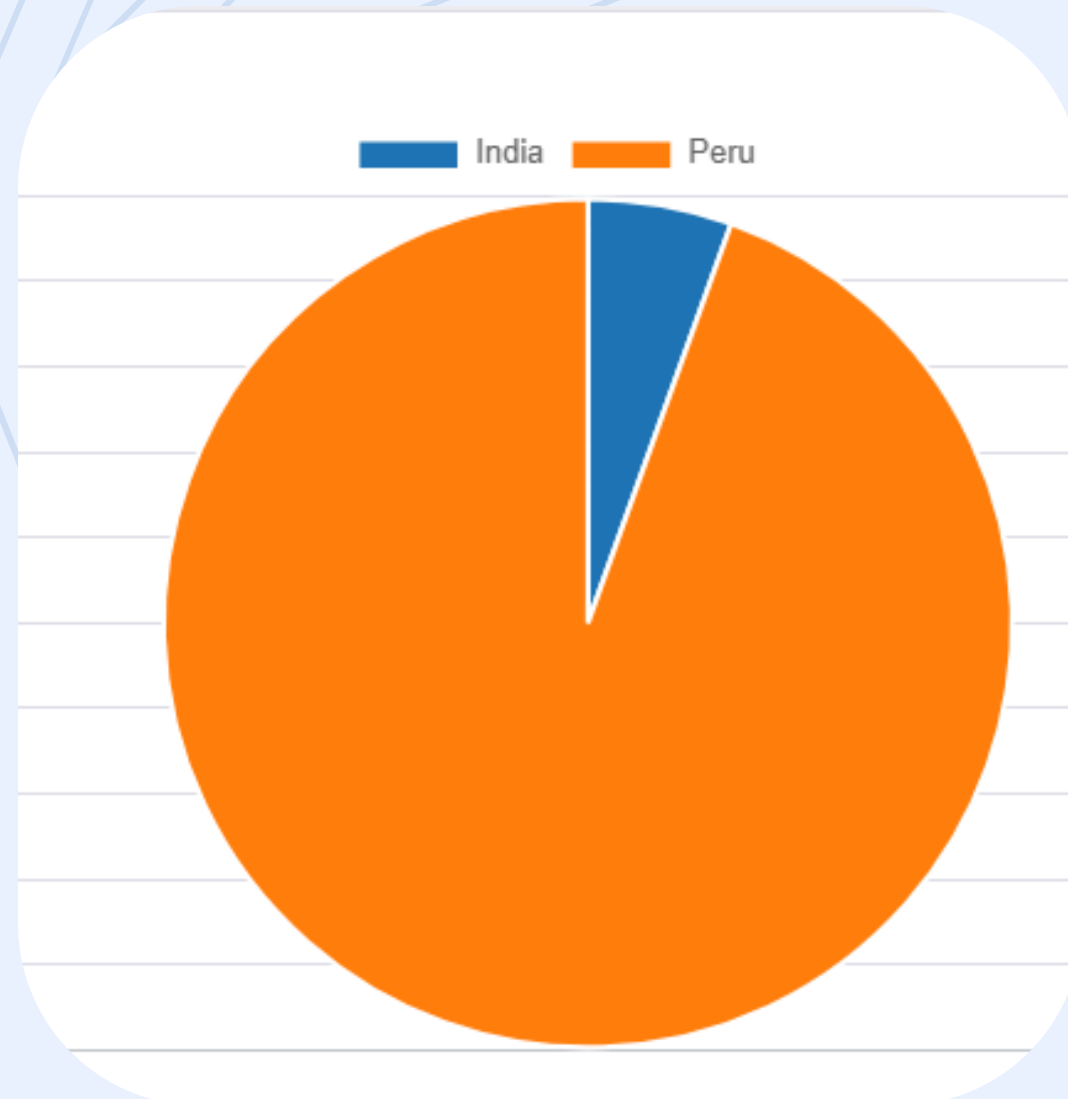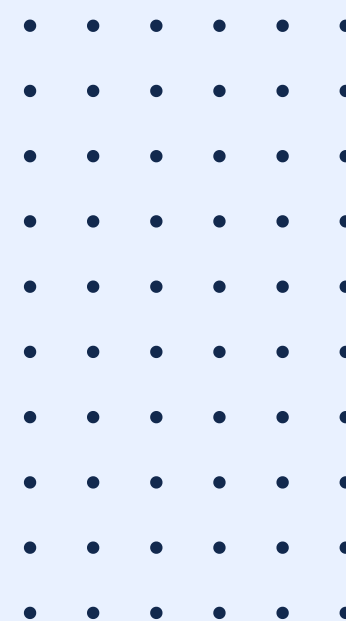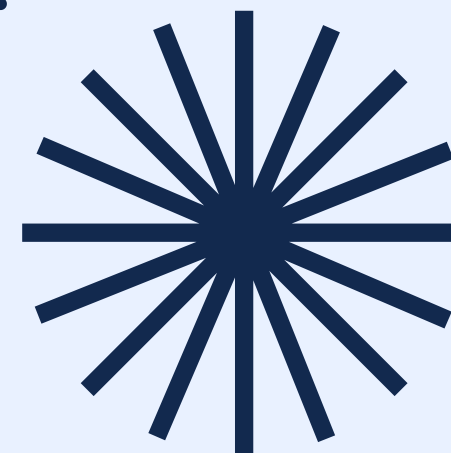# What is the date-wise likelihood of dying due to Covid-19 in India?

In May 2023, India experienced the highest peak in Covid-19 cases and deaths, with 44,952,996 cases and 531,564 deaths. This month recorded the most significant impact, with a death percentage of approximately 1.18%. The data highlights a critical period in the pandemic's progression, necessitating focused analysis and response strategies.

- Peru has the highest COVID-19 death percentage at approximately 0.65%.
- India's COVID-19 death percentage is 0.00000375%, much lower than Peru.
- The death percentage for Peru is substantially higher than India's, highlighting a stark difference in the mortality rate due to COVID-19.

Which country has the highest death percentage relative to its population?

In the analysis of Covid-19 death percentages, Peru showed the highest death percentage at approximately 0.65%. In contrast, India had a significantly lower death percentage of 0.00000375%. This highlights the varying severity of the pandemic's impact across different countries, with Peru experiencing a much higher mortality rate compared to India.

```sql
--Total % of deaths out of entire population- in India
select
    location,
    max(total_deaths)/avg(cast(population as bigint)*100) as percentage
from covid_deaths
group by location
order by location asc;

--Max of deathPercentage
WITH death_percentage AS (
    SELECT
        location,
        (MAX(total_deaths) / AVG(CAST(population AS DOUBLE PRECISION)) * 100) AS death_percentage
    FROM
        covid_deaths
    WHERE
        total_deaths IS NOT NULL
        AND population IS NOT NULL
    GROUP BY
        location
)
SELECT
    location,
    death_percentage
FROM
    death_percentage
ORDER BY
    death_percentage DESC
LIMIT 1;
--In India % of death
select
    location,
    max(total_deaths)/avg(cast(population as bigint)*100) as percentage
from covid_deaths
where location like '%India%'
group by location
order by location asc;
```
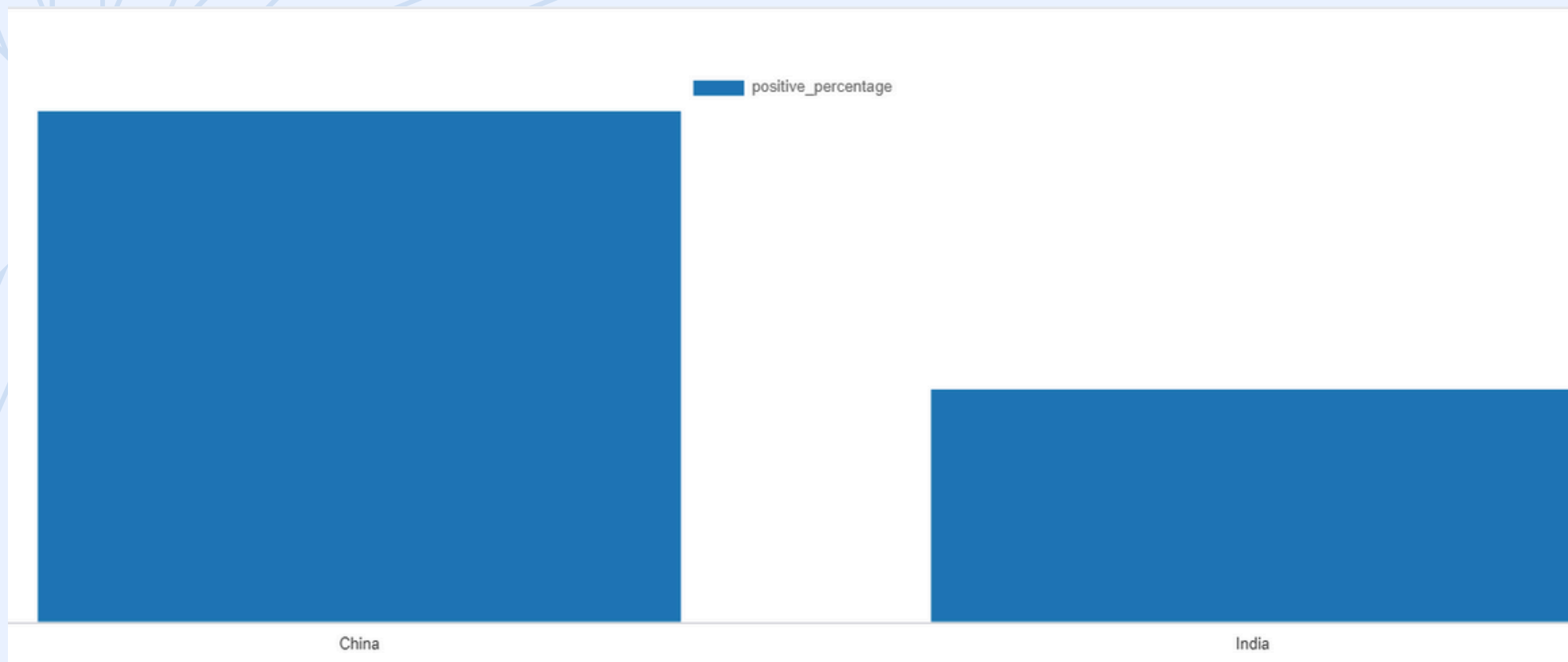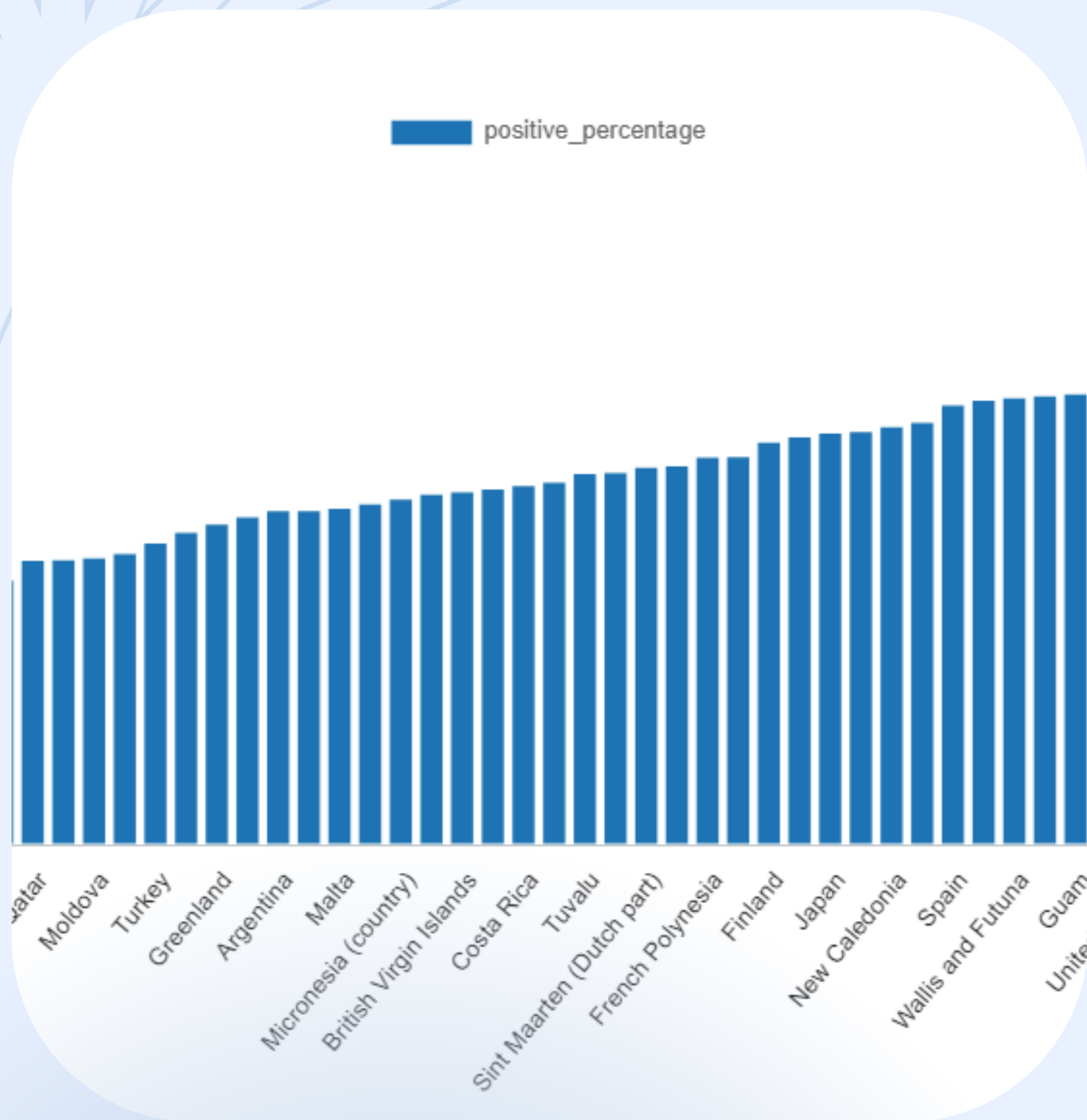
- The percentage of positive Covid-19 cases for China is 0.0007%, while for India it is 0.00032%.
- China's percentage of positive cases is more than double that of India, indicating a higher proportion of the population tested positive in China.

What is the total percentage of Covid positive cases in India?

```
total positive cases % india and china
lect location,
  max(total_cases)/avg(cast(population as double precision)*100) as positive_percentag
om covid_deaths
ere
  location like '%India%' or location like '%China%'

oup by location
  order by positive_percentage desc;
```

The analysis shows that China has a higher percentage of positive Covid-19 cases (0.0007%) compared to India (0.00032%). This comparison highlights a greater proportion of the population being affected in China. The results were visualized in a graph for better understanding.
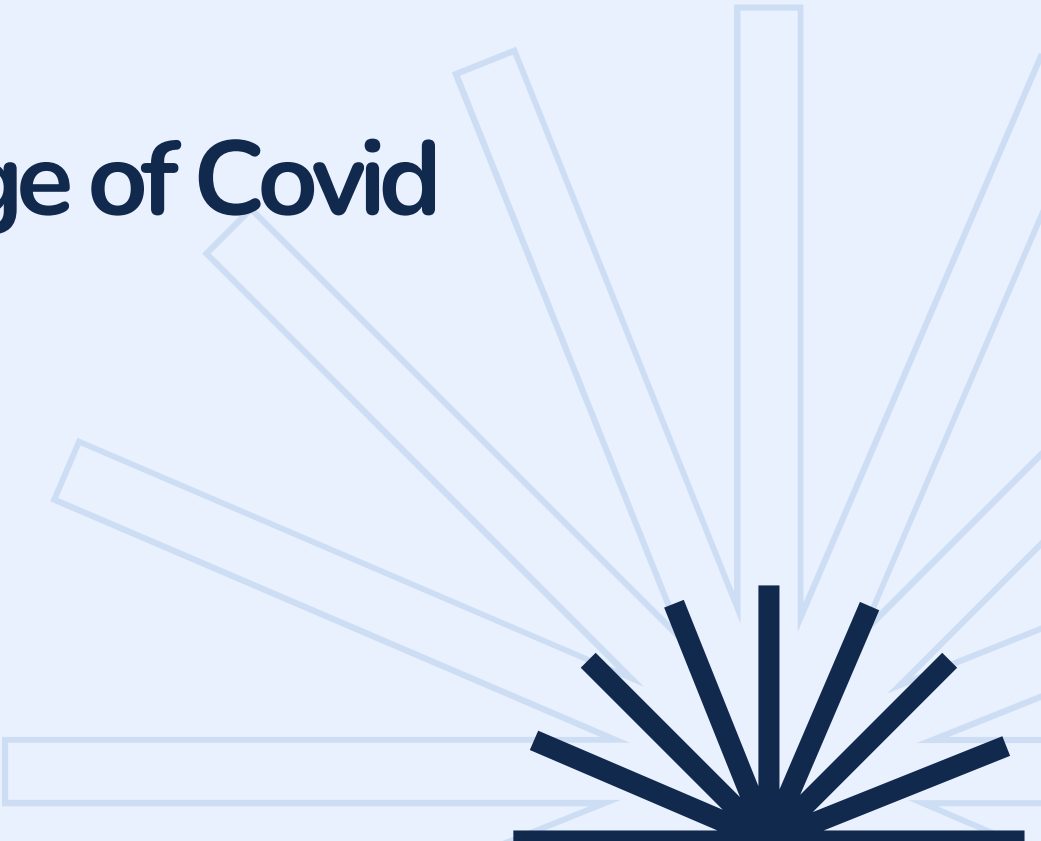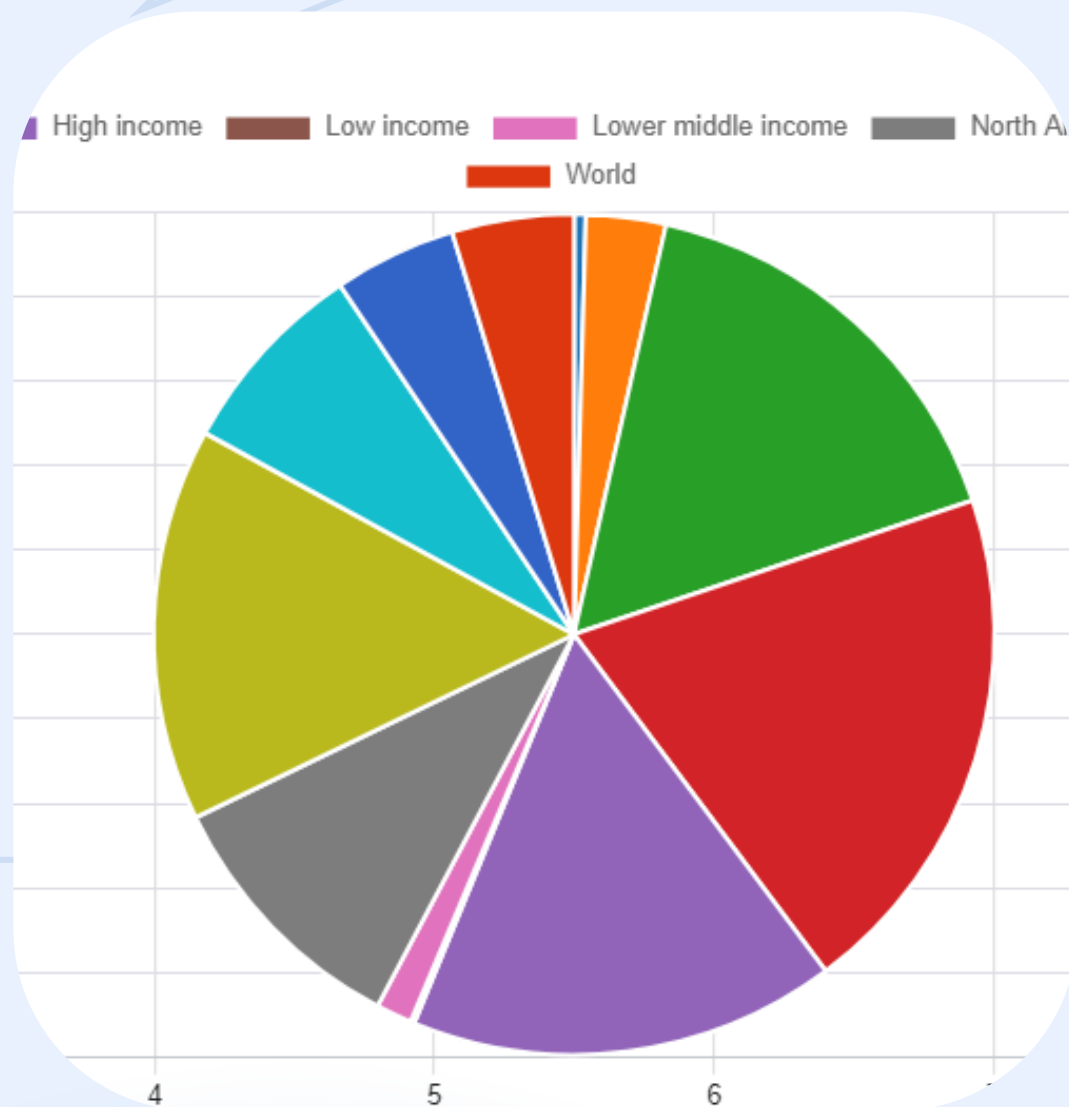
- This analysis helps compare the Covid-19 impact across different locations by standardizing case counts relative to population size.
- The result shows Cyprus has the highest positive case percentage at 0.0073%, indicating a significant proportion of the population tested positive.

```
1    --total positive cases % worldwise
2  ⌄ select location,
3        max(total_cases)/avg(cast(population as double precision)*100) as positive_percentage
4    from covid_deaths
5
6    group by location
7    order by positive_percentage asc;
```
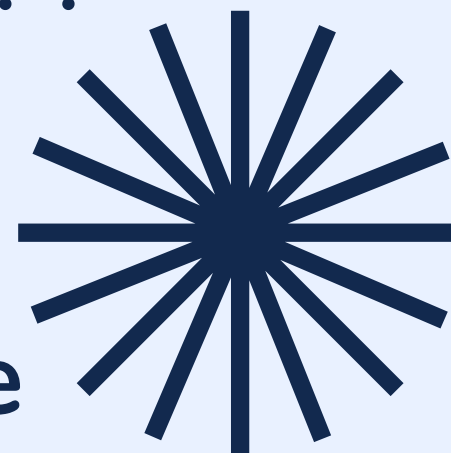
What is the total percentage of Covid positive cases globally?

—

This SQL code calculates the percentage of positive Covid-19 cases relative to the population for each location. It groups the data by location and computes the maximum total cases divided by the average population, multiplied by 100. The result identifies Cyprus as having the highest positive case percentage at 0.0073%.

High income Low income Lower middle income North A...

World

- The data reveals substantial differences in Covid-19 impacts, with Oceania and Europe also showing relatively high case percentages at 0.0597% and 0.0263%, respectively.
- Africa has the lowest cases percentage (0.00163%) and deaths percentage (0.000041%), highlighting the diverse effects of the pandemic globally.

```
select location,
    max(total_cases)/avg(cast(population as double precision)*100) as cases_percentage
from covid_deaths
where continent is null
group by location;
--continent with max case(top3)
SELECT
    continent,
    MAX(total_cases) / (AVG(CAST(population AS DOUBLE PRECISION)) * 100) AS cases_percentage
FROM
    covid_deaths
WHERE
    continent IS NOT NULL
GROUP BY
    continent
ORDER BY
    cases_percentage DESC
LIMIT 3;
--continetwise death vs cases %
SELECT
    continent,
    MAX(total_cases) / (AVG(CAST(population AS DOUBLE PRECISION)) * 100) AS cases_percentage,
    MAX(total_deaths) / (AVG(CAST(population AS DOUBLE PRECISION)) * 100) AS deaths_percentage
FROM
    covid_deaths
WHERE
    continent IS NOT NULL
GROUP BY
    continent
ORDER BY
    cases_percentage DESC, deaths_percentage DESC;
```
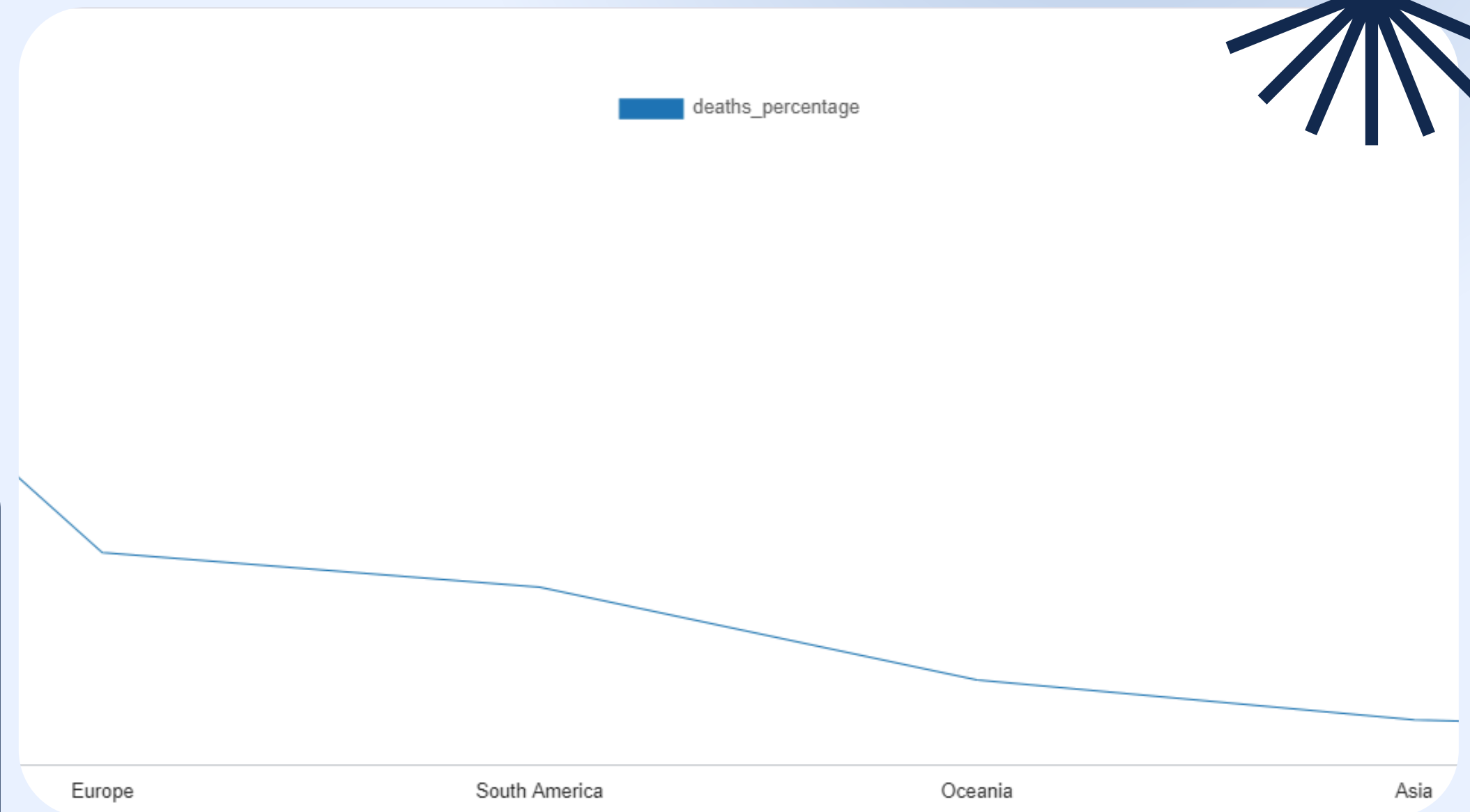
What are the continent-wise positive case percentages?

This SQL code calculates the Covid-19 cases and deaths percentages for each continent. North America has the highest cases percentage at approximately 0.0704% and the highest deaths percentage at 0.00077%. The results highlight the varying impacts of Covid-19 across different continents.

What are the continent-wise death percentages?

deaths_percentage

| Europe | South America | Oceania | Asia |

- The SQL analysis reveals North America has the highest Covid-19 deaths percentage (0.00077%), while Africa has the lowest (0.000041%). This indicates a significant disparity in the pandemic's impact on different continents, with North America experiencing a greater loss relative to its population.
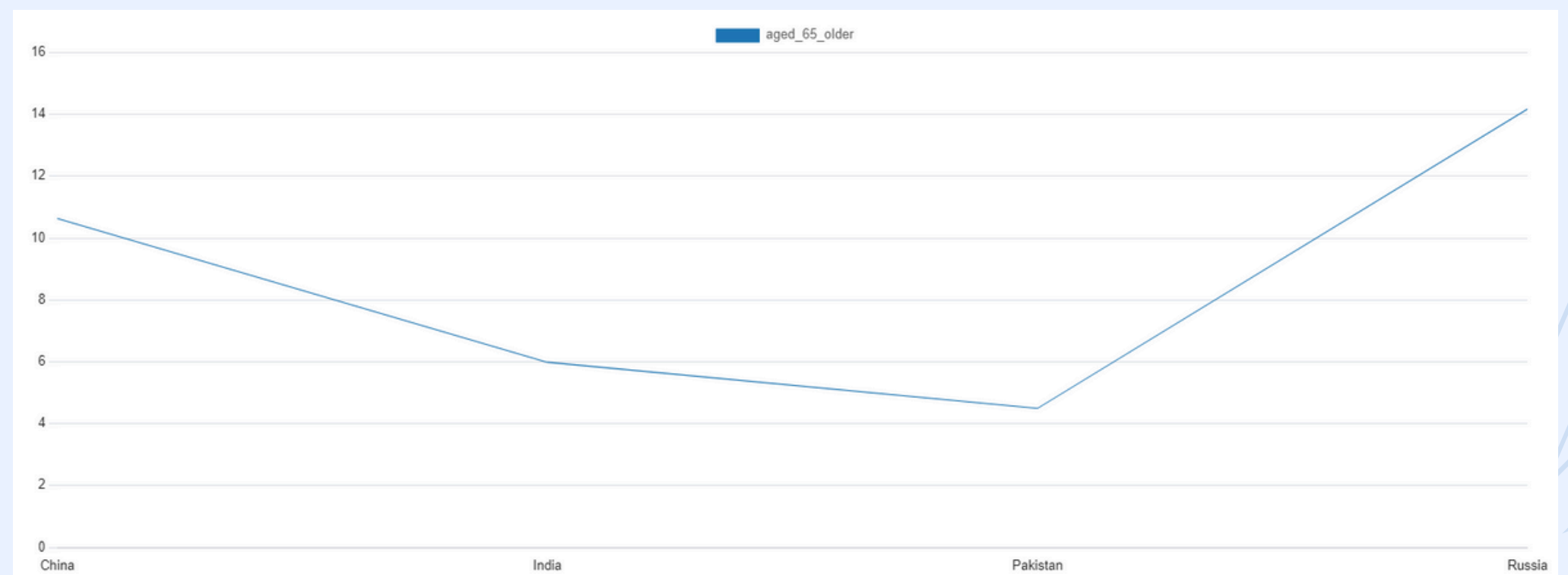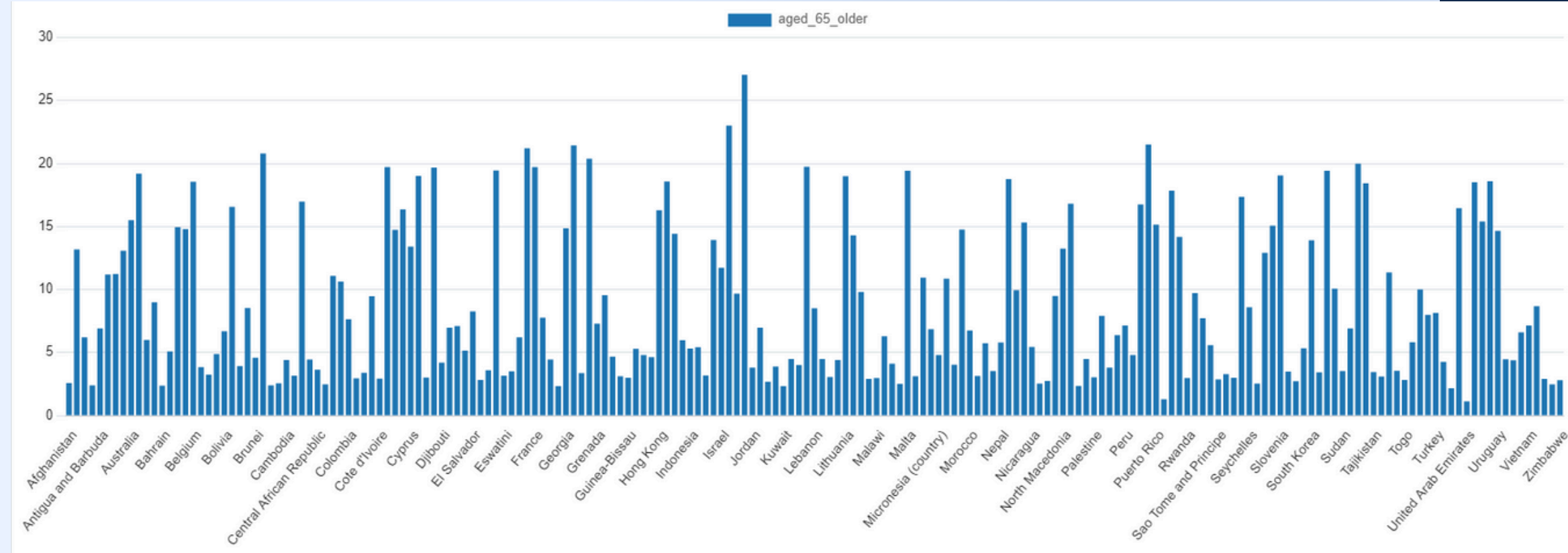
```sql
SELECT
    continent,
    MAX(total_deaths) / (AVG(CAST(population AS DOUBLE PRECISION)) * 100) AS deaths_percentage
FROM
    covid_deaths
WHERE
    continent IS NOT NULL
GROUP BY
    continent
ORDER BY
    deaths_percentage DESC;
```

What is the distribution of the population aged > 65 by country?

```sql
--Countries having average of death for people having age greater than 65
select
    location,
    avg(aged_65_older) as aged_65_older
from covid_vaccinations
where aged_65_older is not null
group by location
order by location asc;
```

```sql
SELECT location,
       MAX(aged_65_older) AS aged_65_older
FROM covid_vaccinations
WHERE location IN ('India', 'Pakistan', 'USA', 'Russia', 'China')
GROUP BY location;
```

- The provided SQL code selects the maximum percentage of the population aged 65 and older (aged_65_older) for each location from the covid_vaccinations table, groups the results by location, and orders the output in descending order by location name.

Here are the key insights derived from the dataset:

01.

- Total Cases and Deaths by Continent:
- Africa: 301,831,375 total cases and 7,913,631 total deaths.
- Asia: 226,231,005 total cases and 8,810,715 total deaths.
- Europe: 372,481,374 total cases and 4,211,835 total deaths.
- Oceania: 6,191,921 total cases and 25,353 total deaths.

02

- Countries with the Highest Total Deaths:
- Africa: 259,101 total deaths.
- Afghanistan: 7,998 total deaths.
- Algeria: 6,881 total deaths.
- Albania: 3,605 total deaths.
- Angola: 540 total deaths.
- Andorra: 159 total deaths.
- American Samoa: 34 total deaths.

03

- Countries with the Highest Total Deaths:
- Africa: 259,101 total deaths.
- Afghanistan: 7,998 total deaths.
- Algeria: 6,881 total deaths.
- Albania: 3,605 total deaths.
- Angola: 540 total deaths.
- Andorra: 159 total deaths.
- American Samoa: 34 total deaths.

Analyzing the COVID-19 impact and vaccination status for India and the entire continent of Asia reveals significant insights. India shows a considerable number of total cases and deaths, indicating a severe impact. The vaccination data highlights the progress in vaccinating the elderly population and the overall vaccination drive. When considering Asia as a whole, the aggregated data illustrates the broader regional trends, showing the extensive efforts in combating the pandemic through vaccinations and the varying severity of impact across different countries. This comparison underscores the importance of regional cooperation and targeted health measures to mitigate the virus's effects.