

# Covid-19

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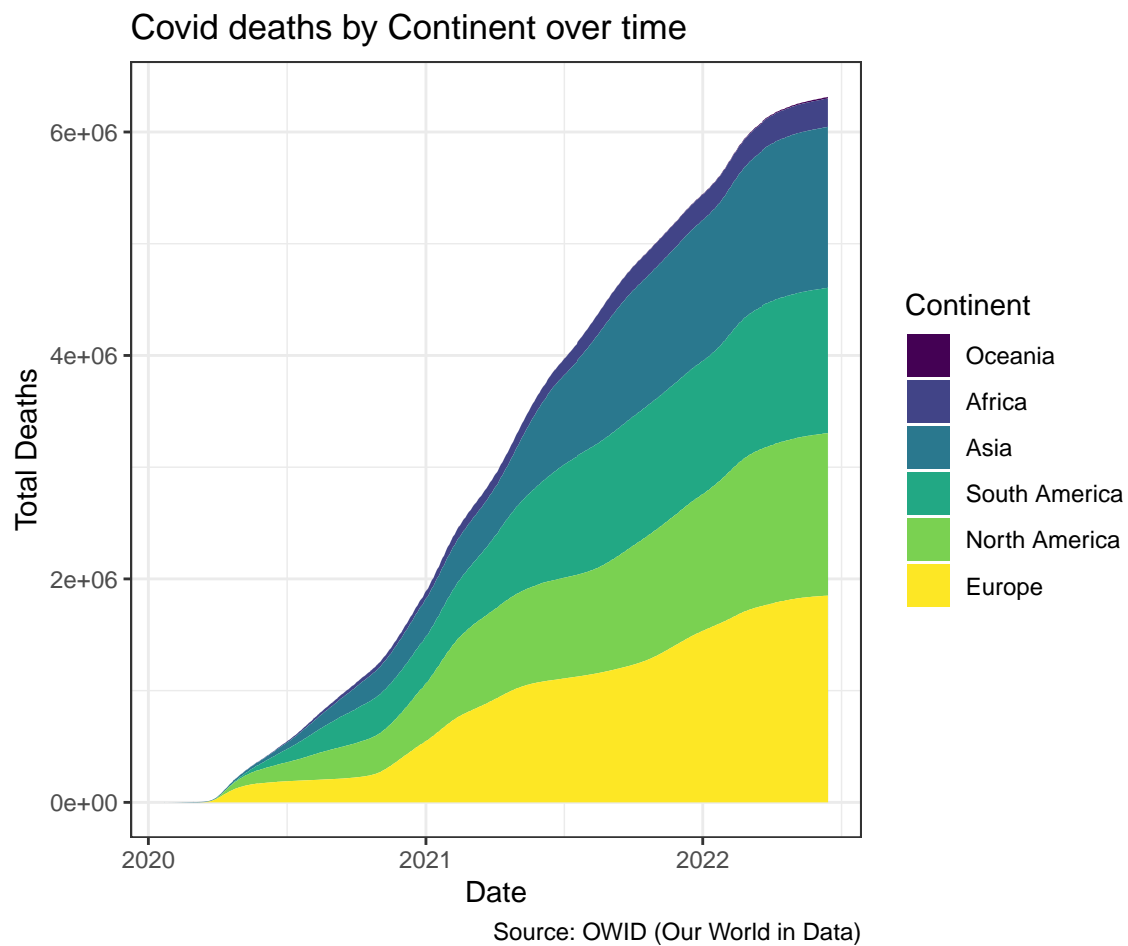
## **Abstract**

This document aims to use global Covid data in order to investigate patterns in Covid-19 statistics. The data was provided by Our World in Data (OWID). Primarily, this analysis will focus on continent level differences in Covid-19 trends.

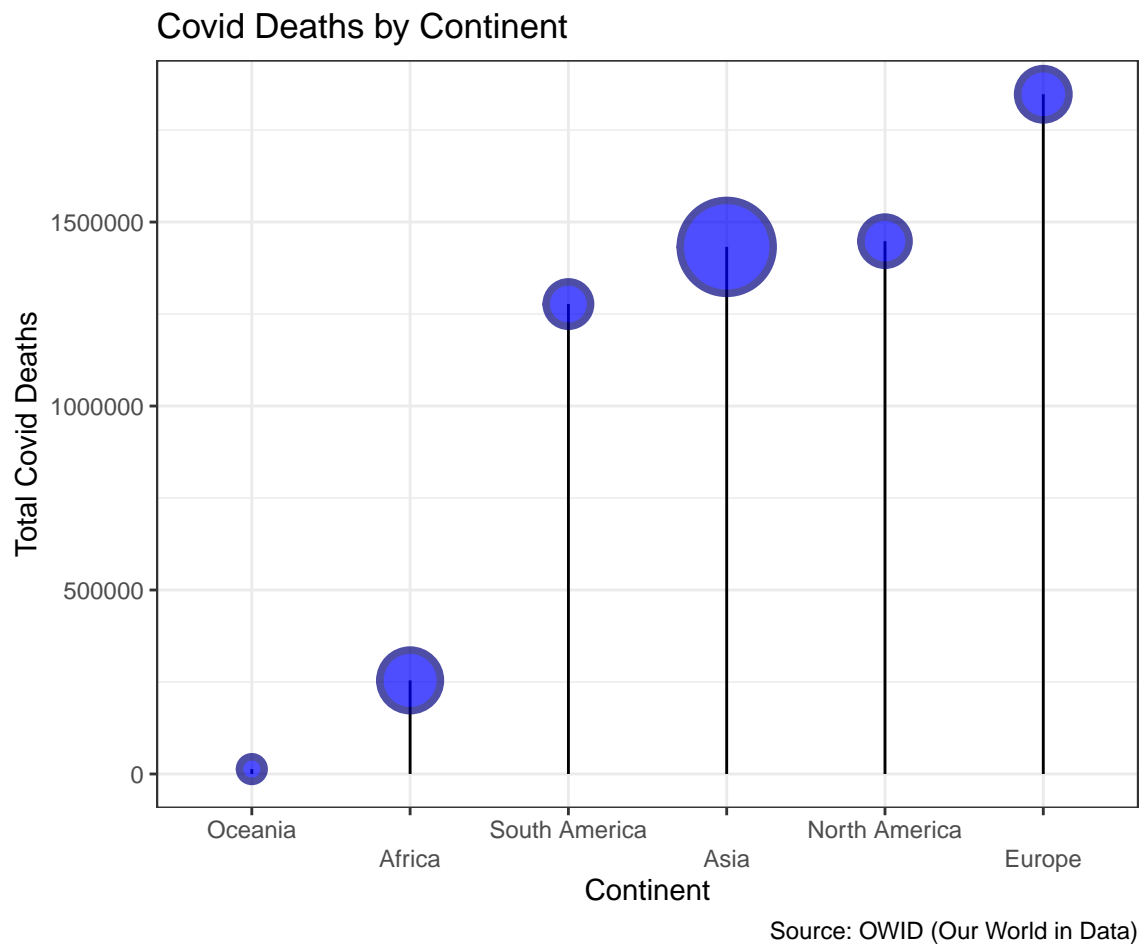
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## 1. Covid deaths by Continent



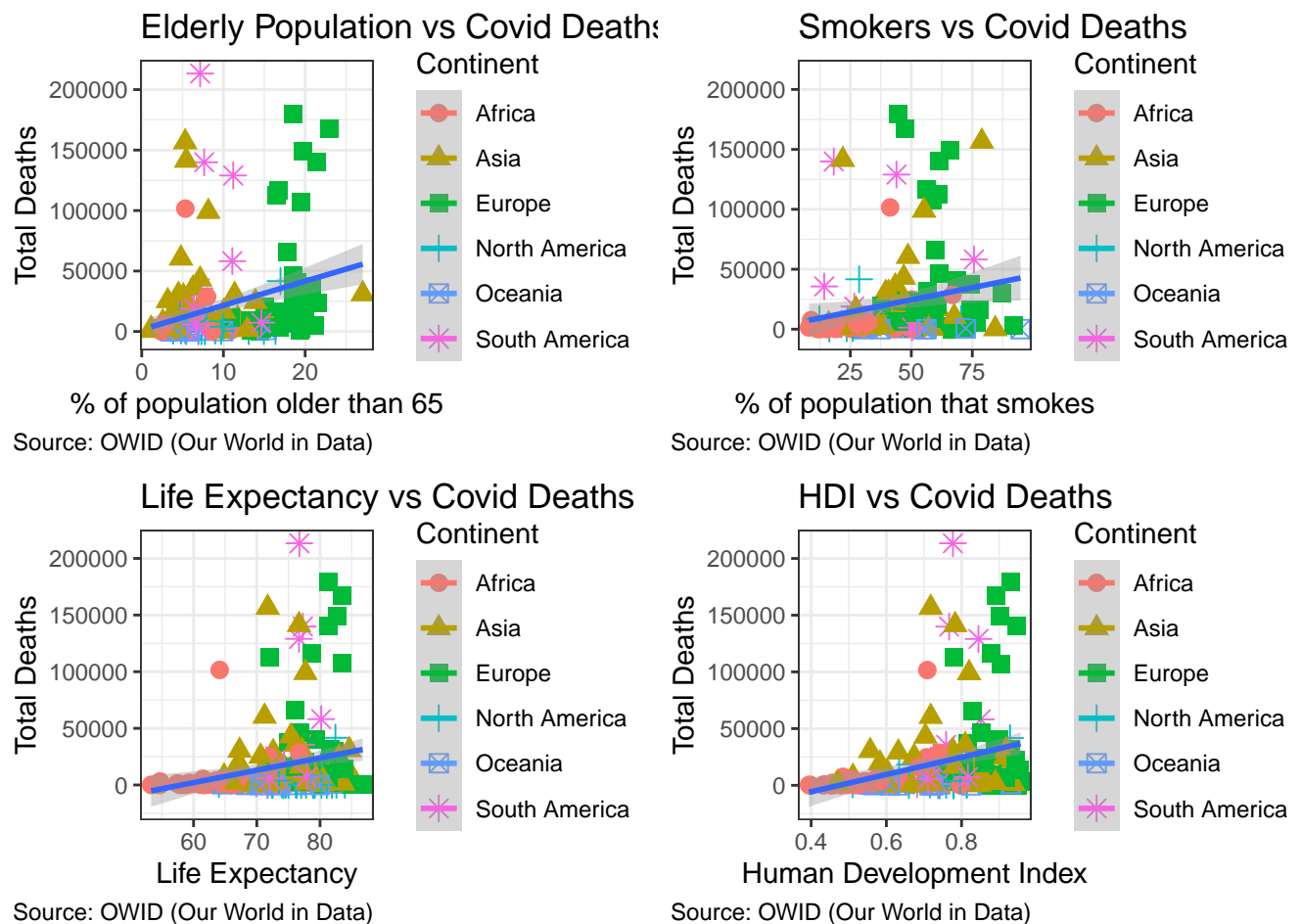
The graph above breaks down Covid-19 deaths over time by continent. Europe had the most deaths and Oceania the least (as can be seen from the fact that they are barely visible on the graph). Africa had the second lowest amount of deaths.



The lollipop chart above once again shows the total deaths broken down by continent. The size of each point is representative of the continent population size. We see that population size is not indicative of Covid deaths. Africa has a larger population size than South and North America, yet has far fewer Covid deaths.

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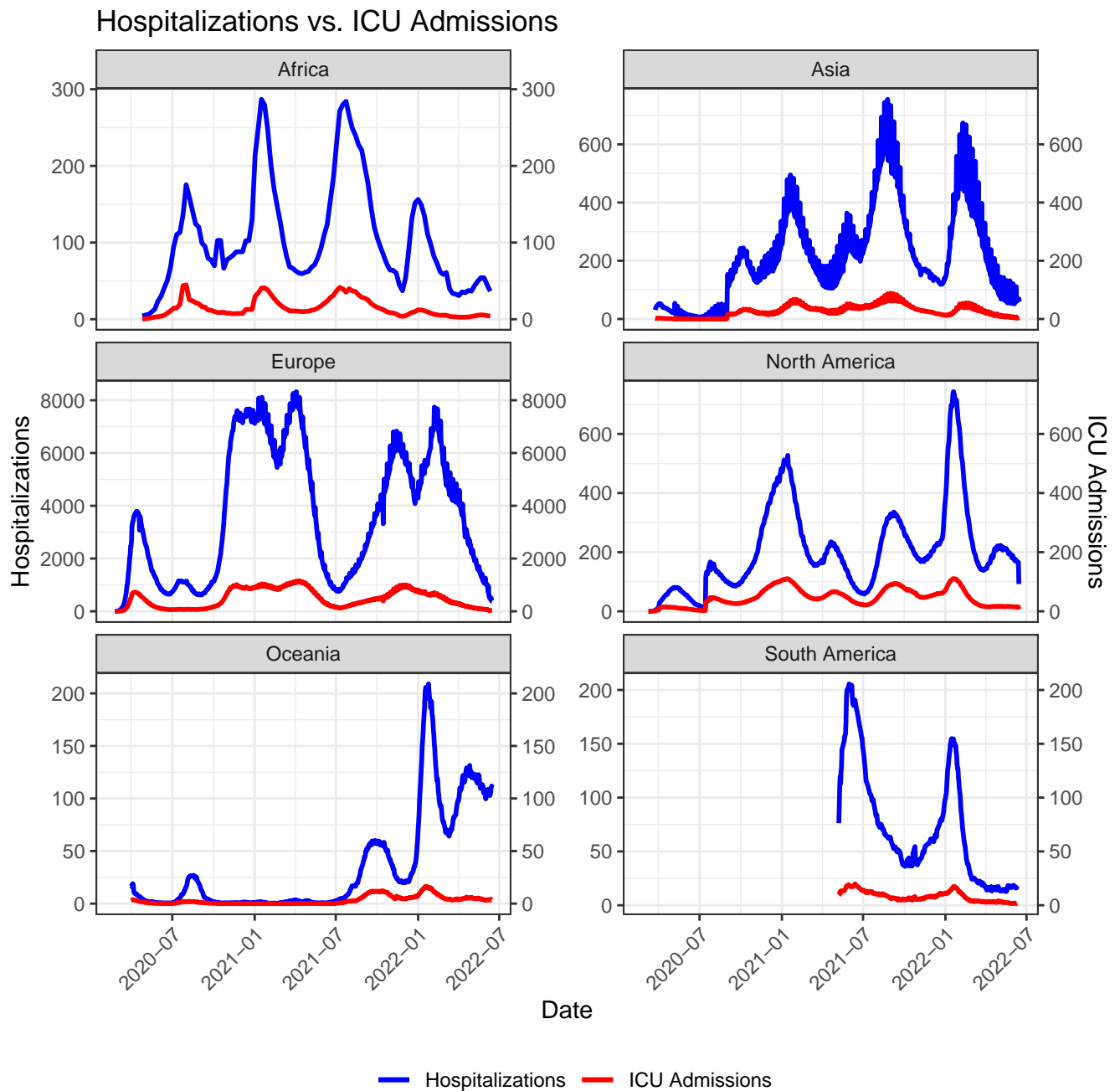
## 2. Demographic factors and Covid



The plots above show the relationship between various demographic factors and total Covid deaths. Elderly population and Smokers both have a positive relationship with Covid deaths as expected. What is surprising is that life expectancy is also positively correlated with Covid deaths. One potential explanation here could be that higher life expectancy is positively correlated with having more elderly people in the population and therefore these countries experience more deaths. Lastly, the HDI relationship seems erroneous. What is likely happening here is that Europe's high death toll is biasing results.

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### 3. Hospitilastion and ICU



The graph shows that for all continents, shortly after hospitalization started to increase, so would ICU patients. This effect is likely due to individuals first being hospitalized and shortly after their situation would deteriorate and they would be transferred to ICU.