



INCOME, POVERTY, AND WEALTH

How these factors may have impacted life expectancy and health in 2019

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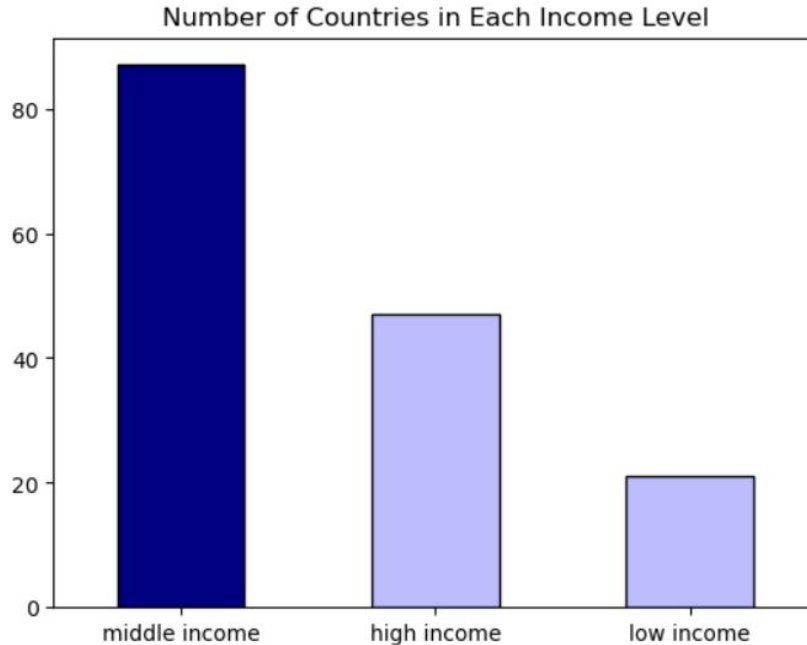
Problem Statement

The COVID-19 pandemic gravely impacted the lives of many people worldwide. It dealt one of the biggest setbacks to the 21st century (The World Bank). If we can understand the ways countries were affected when it occurred, we can develop better health outcomes for those countries. I hypothesized that financial disparities, as reflected by global income levels, directly affected life expectancy during COVID. The aim of this study was to investigate whether nations classified as low income also exhibited lower life expectancy and faced challenges in paying for healthcare services when COVID started.

The Analysis

- Only included data found in: gross national income(GNI), life expectancy, and healthcare expenditure
 - 155 countries
- Income level categorization based on Global Health Observatory (GHO) indicators
 - Middle income, high income, low income
- Compared countries based on income level:
 - Example:
 - low income countries median life expectancy = ~64 years
 - middle income countries median life expectancy = ~72 years
 - high income countries median life expectancy = ~81 years

Countries grouped by income

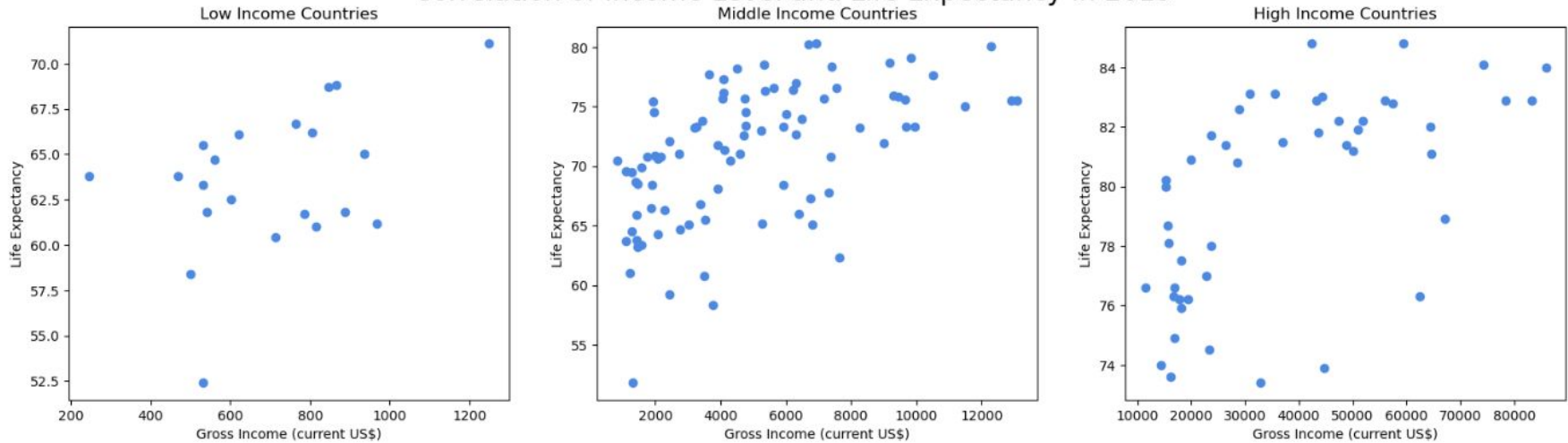


Categories

- Low income = < \$1,045 per capita
- Middle Income = \$1,046 to \$12,745 per capita
- High income = > \$12,745 per capita

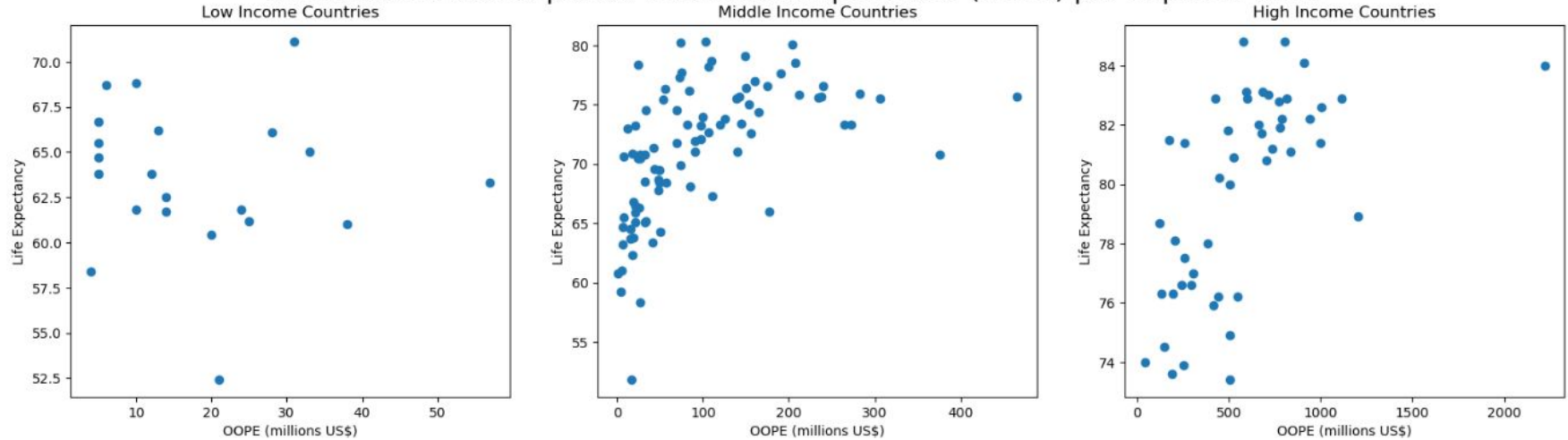
Results

Correlation of Income Level and Life Expectancy in 2019

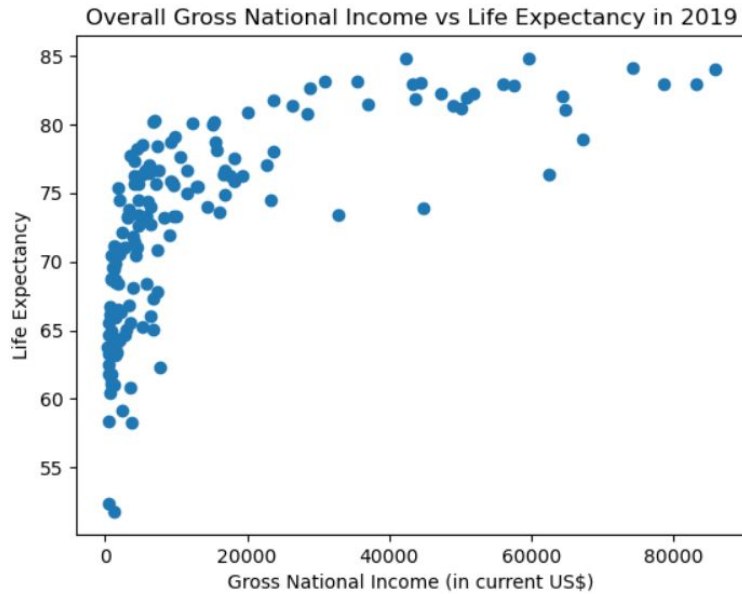


Results

Correlation of Out-of-pocket Healthcare Expenditure (OOPE) per Capita in 2019



Results



Scatterplot shows the overall relationship between gross national income (GNI) and life expectancy of all countries during 2019

The shape of the graph denotes a positive association that is nonlinear and strong

Overall 2019, in income level and life expectancy was moderately correlated

Conclusion and Recommendations

Though it is not the direct cause of low life expectancy, income levels can affect life expectancy outcomes. I would urge country officials to employ policies such as universal healthcare and higher minimum wages to focus on improving health outcomes for their citizens at all income levels and bridge income level imbalances as well. I also recommend addressing socioeconomic inequalities that can lead to this disparity.

Being able to pay for out-of-pocket healthcare expenditures can also be linked to high life expectancy rates, but not directly cause it. Spending more on healthcare is not the direct reason why someone's life expectancy can increase; however, countries where people did not have financial barriers correlate with healthcare being one of the many keys to increased life expectancy rates.