



GLOBAL DISEASES

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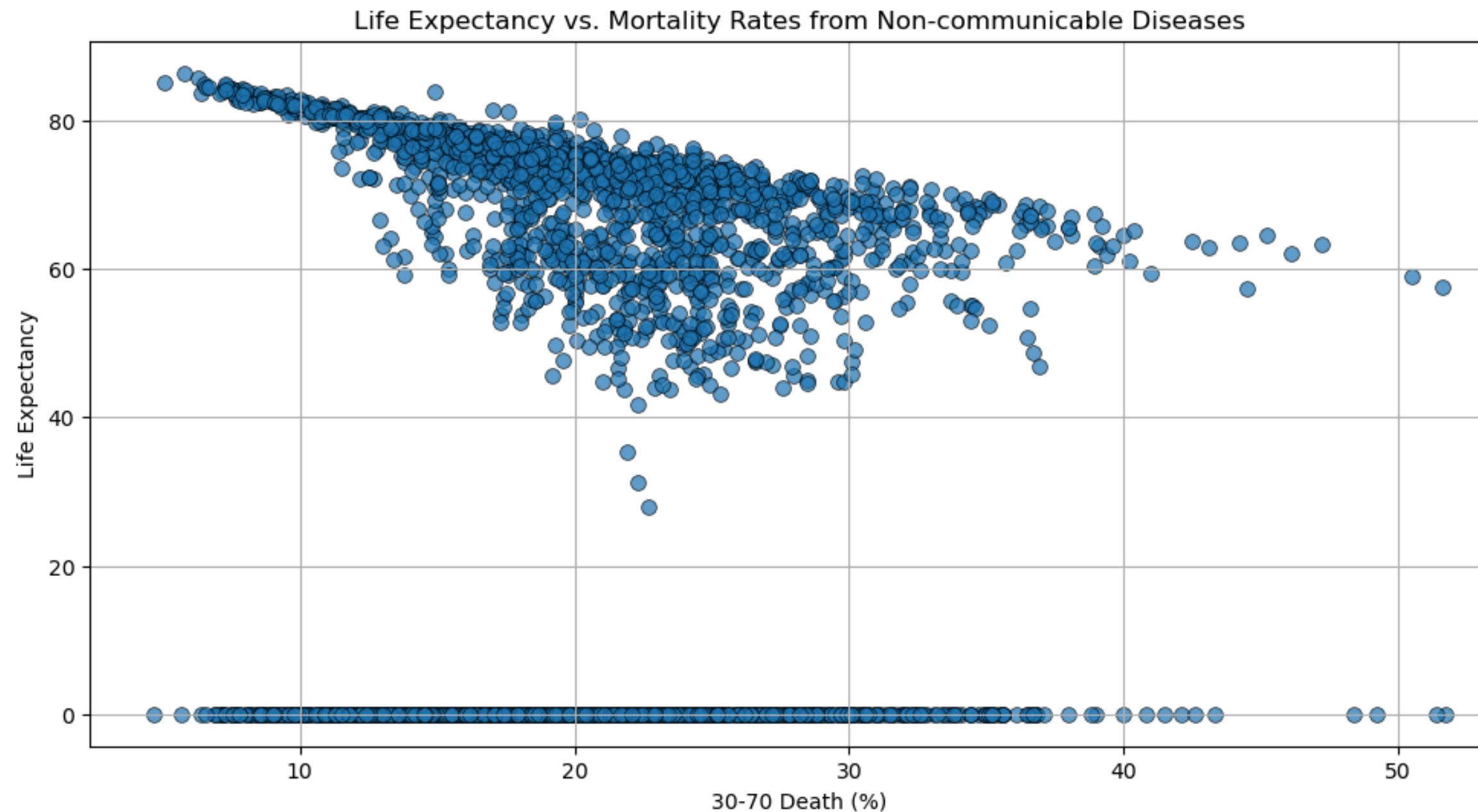
Introduction

Global Health Diseases

In this slides we will see a series of statistics of common global diseases that have been altered in the last years.

We will cover important issues such as medical coverage, diseases that are detected and recorded different and many more variables that we find in the health environment.

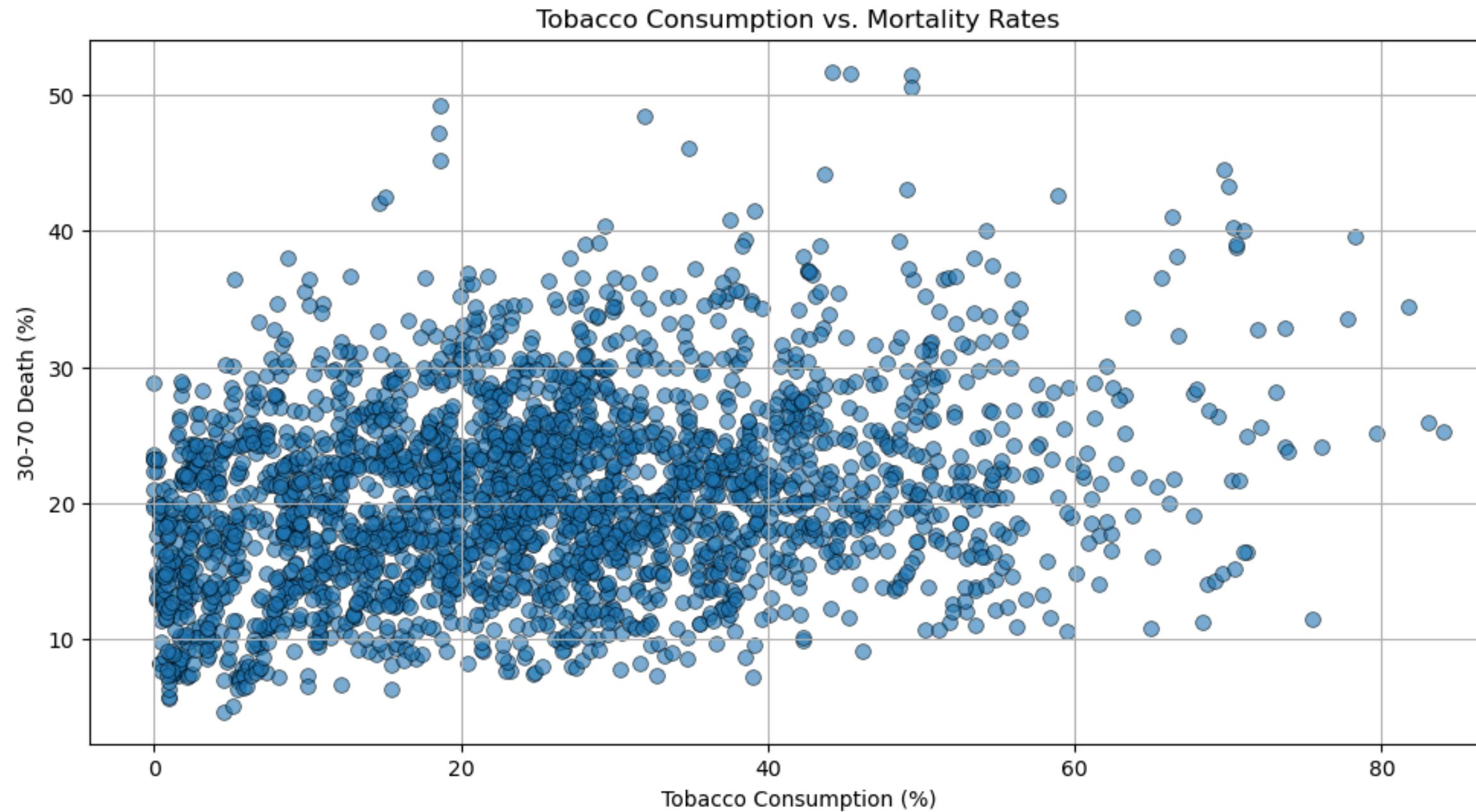
What is the relationship between life expectancy and mortality rates from cardiovascular diseases, cancer, diabetes, and respiratory diseases?



The scatterplot reveals a clear negative correlation between life expectancy and mortality rates from non-communicable diseases. As the mortality rate increases, life expectancy tends to decrease. Countries with lower mortality rates (around 10-15%) generally have life expectancies between 70-80 years. In contrast, regions with higher mortality rates (up to 50%) tend to have significantly lower life expectancies. Overall, the data highlights the substantial impact of non-communicable diseases on reducing life expectancy.



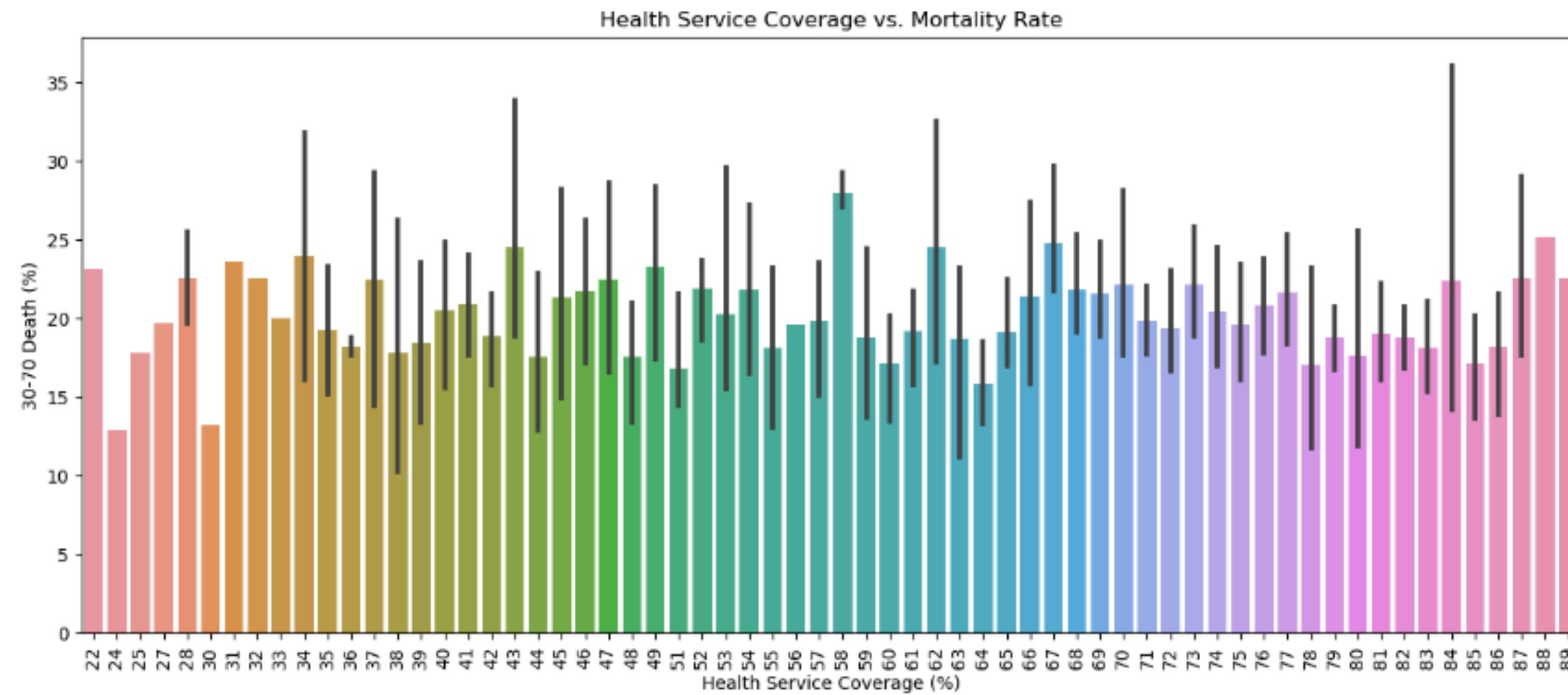
What is the correlation between tobacco use and mortality rates from cardiovascular diseases, cancer, diabetes, or respiratory diseases?



There is a weak correlation between tobacco consumption and mortality rates from non-communicable diseases. Most data points are concentrated at lower tobacco consumption levels (0-40%) and mortality rates between 10-30%. While a slight upward trend is observed, the relationship is not strong or clear. Outliers with higher tobacco consumption (above 60%) do not show a significant increase in mortality. This suggests that factors beyond tobacco consumption, such as healthcare access or lifestyle, also play a role in mortality rates from these diseases.



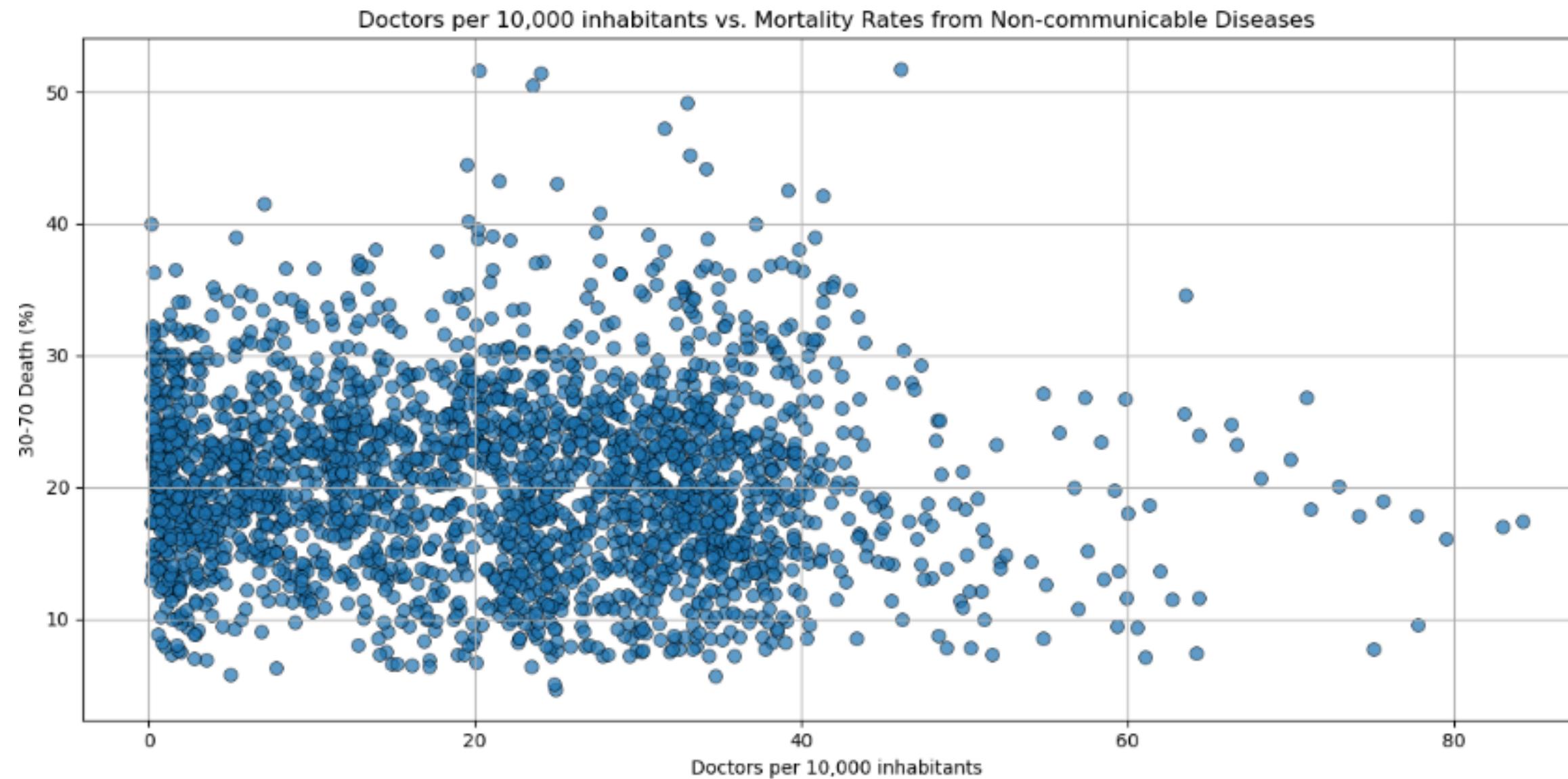
How is the mortality rate from non-communicable diseases related to health service coverage?



The bar plot reveals a mixed relationship between health service coverage and mortality rates from non-communicable diseases. While most mortality rates cluster between 15% and 25%, this distribution appears across both low (20-50%) and high (70%+) health service coverage levels.



Which countries with high mortality rates from cardiovascular diseases, cancer, diabetes, or respiratory diseases have fewer doctors available per 10,000 inhabitants?

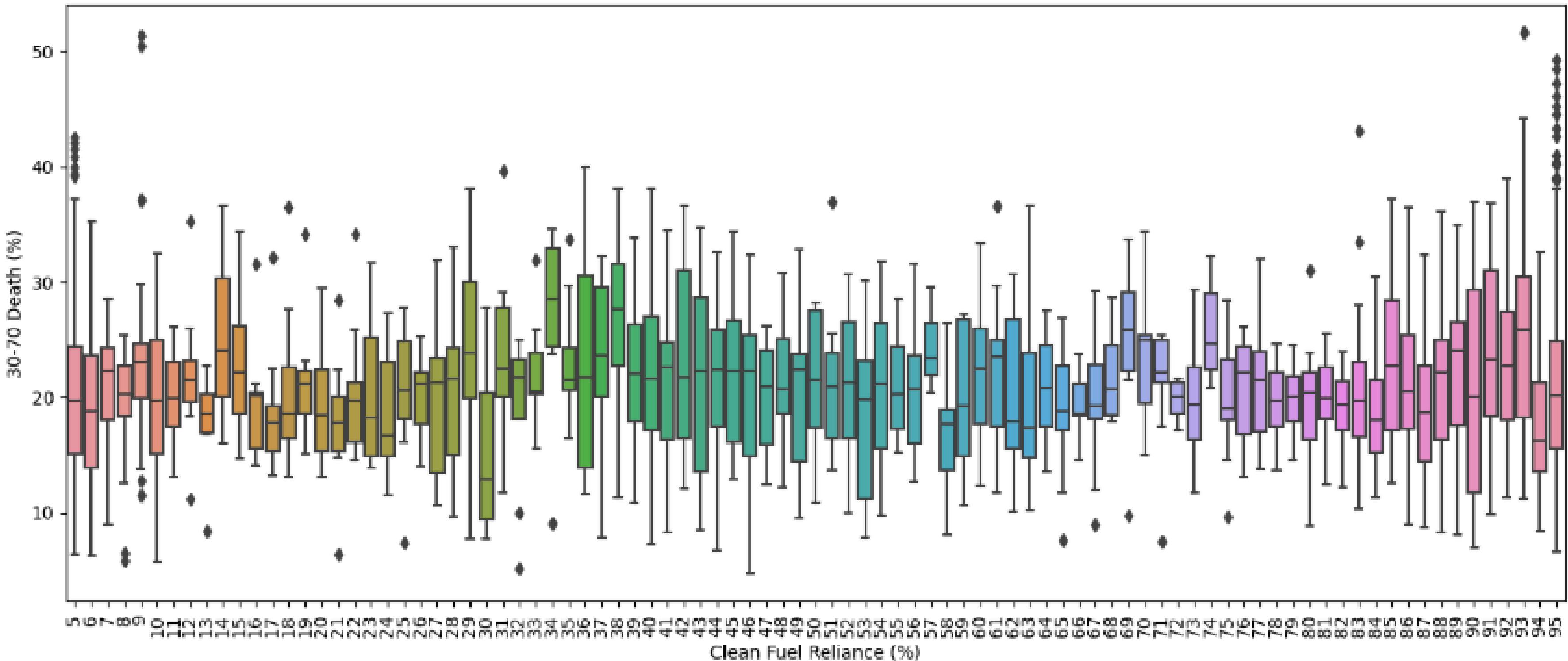


The scatterplot reveals a moderate negative correlation between the number of doctors per 10,000 inhabitants and mortality rates from non-communicable diseases. Generally, countries with fewer than 20 doctors per 10,000 inhabitants show higher mortality rates (around 20-30%).

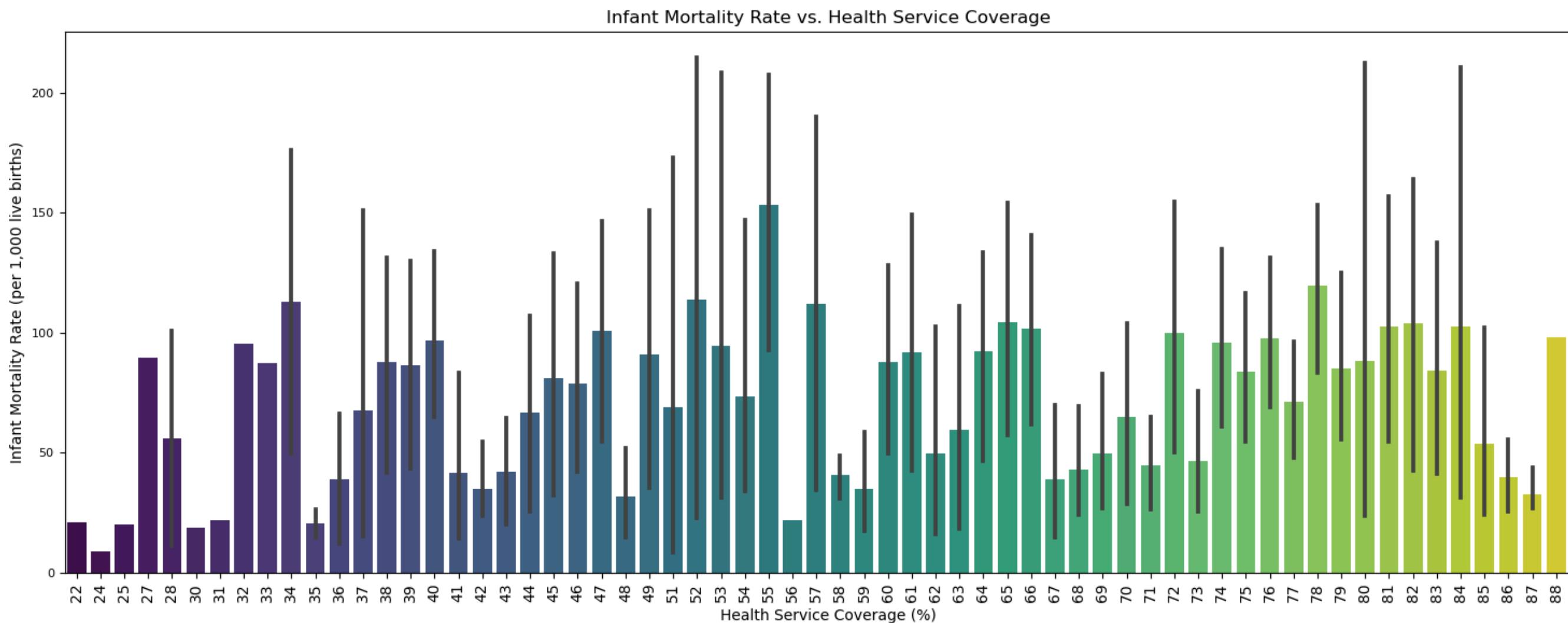


How does reliance on clean fuels affect mortality from cardiovascular diseases, cancer, diabetes, or respiratory diseases?

Clean Fuel Reliance vs. Mortality Rate



Which countries with high infant mortality rates have low health service coverage?

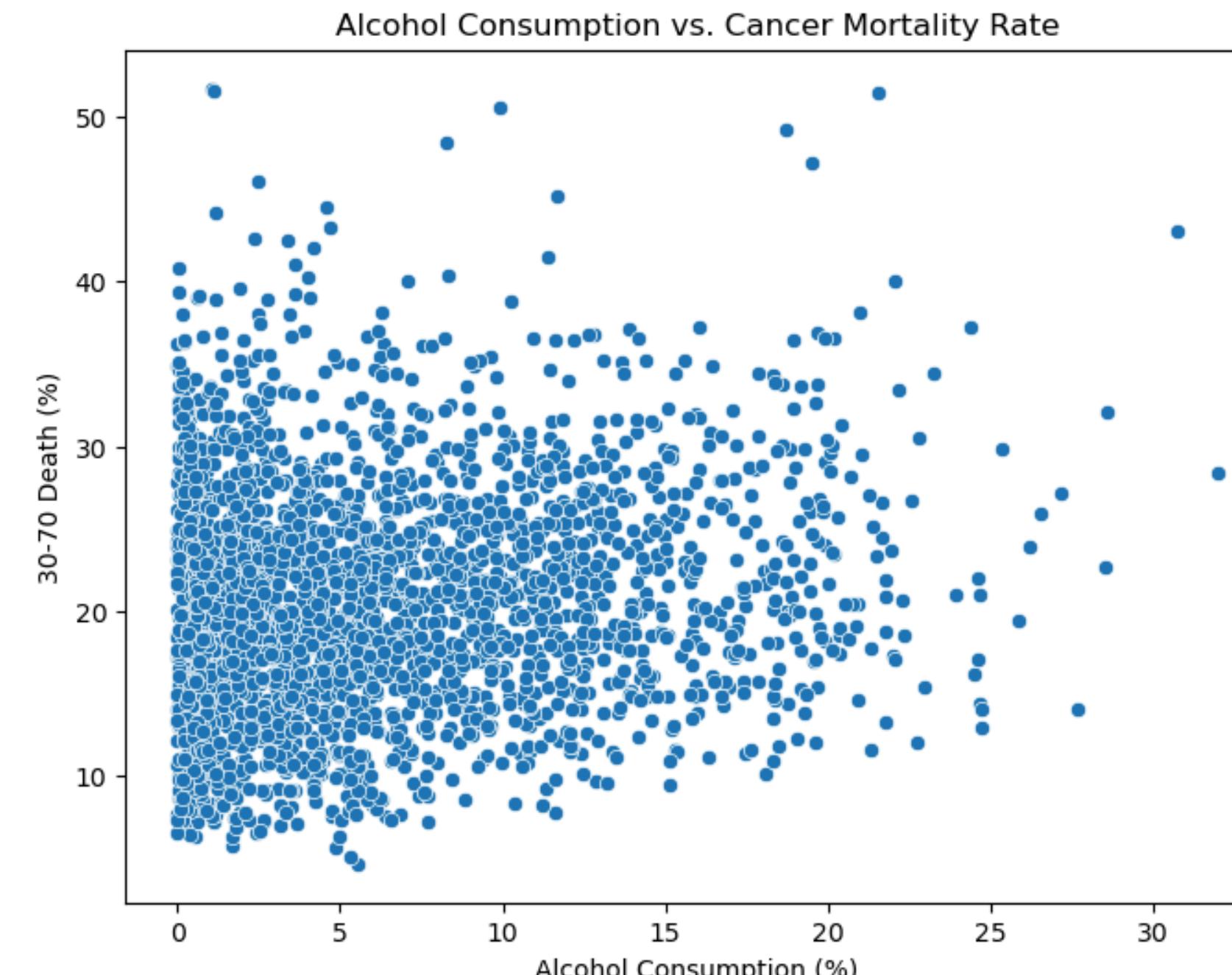


The bar plot shows that countries with low health service coverage (below 50%) tend to have higher infant mortality rates, exceeding 100 deaths per 1,000 live births. In particular, countries with health coverage between 20% and 40% exhibit the highest mortality rates. As health service coverage increases (50%-80%), infant mortality rates generally decrease, though some variation remains. Overall, countries with lower health service coverage experience significantly higher infant mortality, indicating that improved coverage is a key factor in reducing infant mortality rates.



How are alcohol consumption rates related to cancer?

the relationship between alcohol consumption rates and cancer mortality rates. While there appears to be a slight positive correlation, as alcohol consumption increases, cancer mortality rates tend to vary widely without a consistent trend. Most data points cluster within lower alcohol consumption percentages, suggesting that high levels of alcohol consumption do not directly correlate with a significant increase in cancer mortality rates, indicating that other factors may also play a crucial role in cancer outcomes.



Project Conclusion



This project highlights the complex relationship between non-communicable diseases, lifestyle factors, and global health outcomes. Higher mortality rates from diseases like cancer, heart disease, diabetes, and respiratory conditions are linked to lower life expectancy. While lifestyle factors, such as alcohol consumption, and environmental issues like air pollution, play a role, the findings suggest that a combination of healthcare, lifestyle, and policy interventions is essential for improving overall health outcomes.