**DESCRIPTIVE AND EXPLORATORY DATA ANALYSIS**

**INTRODUCTION**

This analysis explores the impact of natural disaster-related diseases on the Consumer Price Index (CPI) and standard of living in affected regions. Specifically, this report aims to answer the research question: "What is the impact of bacterial, viral, infectious disease(general) and parasitic diseases on the Consumer Price Index (CPI) and standard of living in countries or regions affected by natural disasters?"

**SOURCE OF DATA**

The data, sourced from EM-DAT, a comprehensive global database on natural disasters, provides valuable insights into the relationship between disease outbreaks and economic indicators.

**EXPLORATORY ANALYSIS**

This analysis findings indicate that viral diseases had the most significant impact, with Brazil being the most affected country, accounting for the 26.6th percentile of the impact, likely due to its large population, tropical climate, and frequent natural disasters. On the other hand, bacterial diseases had a significant impact on Haiti, which accounted for the 10th percentile of the impact, possibly due to its limited resources, inadequate healthcare infrastructure, and vulnerability to natural disasters. In contrast, United Kingdom and Northern Ireland were the least affected countries, ranking in the 0.001749th and 0.000514th percentiles, respectively, likely due to their robust healthcare systems, effective disaster management strategies, and strong economies. At the regional level, South America bore the brunt, ranking in the 36.8th percentile of the impact, likely due to the prevalence of tropical diseases and frequent natural disasters. South Asia followed, ranking in the 20.6th percentile of the impact, possibly due to its dense population, inadequate sanitation, and limited resources. Northwest Europe, on the other hand, was the least affected region, ranking in the 0.0104th percentile of the impact, likely due to its developed infrastructure, effective disaster response systems, and lower incidence of natural disasters. The analysis shows that while Brazil was the most affected country by the epidemic, the CPI bar plot reveals that India had the highest CPI impact, suggesting that India’s large population and economic factors may have contributed to its significant economic instability.

**POSSIBLE SOLUTIONS AND CONCLUSION**

The findings of this report highlight the need for targeted interventions and preparedness measures to mitigate the impact of natural disaster-related diseases on communities. Possible solutions include:

* Strengthening healthcare infrastructure and disaster response systems in vulnerable regions
* Implementing effective disease surveillance and control measures
* Investing in public health education and awareness campaigns
* Enhancing international cooperation and knowledge sharing to combat disease outbreaks
* Developing and implementing robust disaster preparedness and response plans
* Providing support to countries with limited resources to build their capacity for disaster response and management

By implementing these solutions, countries and regions can reduce the impact of natural disaster-related diseases and promote economic stability and public health.

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