LIFE EXPECTANCY(WHO) REPORT

This report will analyze the relationship between life expectancy and various factors, including immunization rates, mortality rates, economic conditions, social influences, and other health-related aspects. Key questions addressed in the report include:

1. Is life expectancy increasing over time?
2. How does the mortality rate impact life expectancy?
3. Which countries have the highest average life expectancy?
4. What is the connection between immunization rates and life expectancy?
5. In what ways do socio-economic factors, such as education levels and income distribution, influence life expectancy?

METHODOLOGY

The analysis of the Life Expectancy dataset was conducted using Power BI Desktop. The dataset was presented as a CSV file. Power BI offers powerful data visualization and modeling capabilities, making it ideal for this analysis.

The data was imported into Power Query for cleaning, where data types were reviewed and corrected as necessary. All null values were replaced with zero to facilitate smooth analysis. This dataset spans 15 years (2000-2015) and includes information from 193 countries. A new column was added to identify the continents of the countries. During the analysis, ten countries were removed due to having data available only for 2013. From the original dataset, two tables were created, named "Life Expectancy" and "Location." Finally, the cleaned data was loaded into Power BI for further analysis and visualization.

In Power BI, a one-to-many relationship was established between the two tables. Various visualizations were used to display relations and correlations between the various dimensions. Charts used in this report includes bar charts, scatter plots, line charts as well as card visuals.

RESULTS AND DISCUSSION

The dataset includes information from 193 countries across six continents, with 84.5% classified as developing countries and 15.5% as developed countries.

European countries recorded the highest life expectancy on an average, followed by North America, with Africa recording the least life expectancy.

Health factors

There was a positive correlation between average BMI and life expectancy. This suggests that higher average BMI levels may be associated with longer life spans, potentially due to better overall health or access to nutrition.

There was a slight decline in immunization rates for diphtheria, polio, and Hepatitis B from 2010 to 2015. The population line graph shows a steep decline during the same period. This demographic shift may explain the decrease in immunization rates, as fewer individuals could lead to reduced vaccination coverage.

Socio-economic factors

From the report, schooling rates have consistently increased over the years, and countries with higher schooling rates tend to have higher life expectancy. This suggests that education plays a crucial role in informing people about factors that can enhance longevity.

The same trend is seen with GDP and total income composition of resources. Countries should prioritize investing more resources in both the health and education sectors, as this could lead to increased life expectancy.

Conclusion

Life expectancy has been rising over the years, driven by higher immunization rates, increased BMI, and improved schooling rates. Enhancing the overall quality of life can significantly contribute to longer lifespans, so countries should prioritize creating better livelihoods for their citizens.