#### The Impact of Adult Mortality and Infant Death Rates on Global Life Expectancy.

#### ****Introduction****

This report focuses on analyzing the impact of **adult mortality** and **infant deaths** on **life expectancy** using the life expectancy data. With visualizations created in Power BI, the analysis explores correlations, trends, and patterns between these variables. The goal is to provide insights into how mortality rates, particularly for adults and infants, influence overall life expectancy.

### ****Problem Statements****

1. **How does adult mortality affect life expectancy?**
2. **Is there a significant correlation between infant deaths and life expectancy, especially in developed vs. developing countries?**
3. **How do trends in adult mortality and infant deaths evolve over time, and how do they impact life expectancy?**
4. **Which countries exhibit the highest levels of adult mortality and infant deaths, and how does that reflect in their life expectancy?**

### ****Insights and Analysis****

#### **1. Adult Mortality vs. Life Expectancy**

The scatter plot analysis revealed a **negative correlation** between adult mortality and life expectancy. This implies that countries with higher adult mortality rates tend to have lower life expectancy. This highlights that adult mortality is a significant driver of life expectancy, especially in developing countries where healthcare systems may struggle to reduce adult mortality rates.

#### **2. Infant Deaths vs. Life Expectancy**

Similarly, infant deaths showed a **negative impact** on life expectancy. Again, countries with higher rates of infant mortality will tend to have much lower life expectancy. This is especially true in countries with limited access to quality healthcare, where higher infant mortality is linked to shorter life spans.

#### **3. Trends in Adult Mortality and Life Expectancy Over Time**

Here, the line chart of trends over time showed that countries experiencing a **decline in adult mortality** also recorded an **increase in life expectancy**. This suggests that public health interventions, improved healthcare access, and preventive care directly contribute to longer life spans in these countries.

#### **4. Adult Mortality and Infant Deaths by Country**

The line and clustered column chart comparing adult mortality and infant deaths across countries revealed that Nigeria and Ethiopia have lower life expectancy. It also showed that those countries with high adult mortality also tend to have **high infant mortality**. This compounding effect underscores those countries with poor healthcare infrastructure and poor maternal health in cases such as that of India experience high mortality, further contributing to lower life expectancy.

### **Recommendation and Conclusion**

The analysis shows that both **adult mortality** and **infant deaths** are critical determinants of life expectancy. Countries with higher rates of mortality consistently experience lower life expectancy. Efforts to improve healthcare systems, focusing on maternal and infant care, and reducing adult mortality through preventive healthcare and counseling can significantly improve life expectancy, especially in developing countries.