**QUESTION TWO**

ii)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficientsa** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 68.161 | .621 |  | 109.751 | .000 |
| Adult Mortality | -.043 | .001 | -.599 | -40.597 | .000 |
| Hepatitis B | .002 | .006 | .006 | .348 | .728 |
| Measles | -3.883E-5 | .000 | -.043 | -3.054 | .002 |
| Polio | .038 | .007 | .096 | 5.374 | .000 |
| Diphtheria | .051 | .008 | .126 | 6.330 | .000 |
| GDP | .000 | .000 | .231 | 15.828 | .000 |
| a. Dependent Variable: Life expectancy | | | | | | |

iii)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficientsa** | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | 75.431 | .245 |  | 307.361 | .000 |
| mortality\_decrease | -.049 | .001 | -.605 | -42.752 | .000 |
| GDP\_increase | .000 | .000 | .282 | 19.959 | .000 |
| a. Dependent Variable: Life expectancy | | | | | | |

The data shows that countries with higher GDP (economic output) tend to have lower mortality rates and longer life expectancies. The unstandardized coefficients from the statistical model indicate this relationship is very significant.

This suggests that economic growth policies could lead to improvements in public health outcomes. **Some implications for public health policies:**

Prioritize funding for healthcare infrastructure, preventive programs, and medical access in areas with economic challenges. This can help translate growth into health benefits.

Focus more on preventive health strategies that address issues early before they become serious problems. This can reduce long-term healthcare costs.

Require collaboration between health sectors and economic planners. Economic development policies should be designed with health impacts in mind.

Continuously monitor the effects of economic changes on life expectancy and mortality rates. This allows public health strategies to be refined based on the real-world impacts.

In summary, the data indicates economic growth is strongly linked to better health outcomes. Integrating economic considerations into public health policymaking can lead to more effective and sustainable health systems.

iv)

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| --- | --- | --- | --- | --- | --- |
| **Residuals Statisticsa** | | | | | |
|  | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | 41.395 | 94.477 | 70.057 | 6.7294 | 2009 |
| Residual | -29.6201 | 15.7584 | .0000 | 5.3231 | 2009 |
| Std. Predicted Value | -4.259 | 3.629 | .000 | 1.000 | 2009 |
| Std. Residual | -5.556 | 2.956 | .000 | .999 | 2009 |
| a. Dependent Variable: Life expectancy | | | | | |