Table 01: **Correlation analysis and descriptive statistics** of different variables

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Descriptive Statistics | | | | | | |
|  | N | Minimum | Maximum | Mean | Std. Deviation | Correlation with “Confirmed” (r) |
| Confirmed | 16585 | .0 | 21873.0 | 22.790 | 323.7760 | 1 |
| Recovered | 16585 | .0 | 10.0 | .008 | .1625 | 0.032 |
| Deaths | 16585 | .0 | 281.0 | .311 | 4.0454 | 0.796 |
| Population | 16452 | 88.00 | 39512223.000 | 387142.67 | 1997001.27 | 0.154 |

There is a weak positive correlation between variable “Confirmed” and “Recovered” which is 0.032. This means that the Covid-19 confirmed people are recovered people from Covid-19 showed very weak correlation. Between variable Death and Confirmed there we found a strong positive correlation which is 0.796. Variable Population and Confirmed showed a weak positive correlation, which is 0.154.

Table 02 multiple linear regression estimation considering “Deaths” as a dependent variable

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model | | Unstandardized Coefficients | | P-Value | 95.0% Confidence Interval for B | |
| B | Std. Error | Lower Bound | Upper Bound |
| 1 | (Constant) | .032 | .019 | .094 | -.006 | .070 |
| Confirmed | .010 | .000 | .000 | .010 | .010 |
| Population | 1.571E-7 | .000 | .000 | .000 | .000 |

From table 2 it can be found that one unit increase in the confirmed case will increase the death by 0.010 times. For the variable Population we found that one unit increase in the population will increase the death by 1.571E-7 times. Here R2 = .640, which represents the proportion of the variance for a dependent variable that's explained by the independent variables in a regression model. That is approximately 64% of the observed variation can be explained by the model's inputs.





