With the data that was analyzed in the study we see a clear relationship between the infant mortality rate and the median age of a nation’s population, obesity rate of that particular nation as well as the GDP - per capita. The fitted model with an adjusted R2 greater than 0.8 show that all these factors have a strong influence on the infant mortality rate. Furthermore the fitted model also show the factors mentioned above having a negative correlation to the infant mortality rate. A lower infant mortality rate is the desired goal of all nations and as such these variables can be used as a reliable measurement of a given country’s health.

The interpretation of the resulting model yields some interesting findings as well as general expected ones. For example, the high level of Collinearity seen amongst the fertility rate, population growth, birthrate and the median age are somewhat expected. As in younger populations being more fertile and having more children resulting in higher birthrates which in turn translates to higher population growth rates.

While the model’s selected variables are somewhat expected, some of the variables that were left out are equally intriguing. The most striking observation being that a high healthcare expenditure did not necessarily translate to a statistically significant lower infant mortality rate. While one can argue that this is counter intuitive further study needs to be done on the subject to see where the actual spend ends up. For example, countries with aging, obese and other disease prone populations will get burdened by high costs of treating diseases rather than investing in preventative care there by skewing the measurement against common sense expectations.

Another unexpected observation is the obesity rate’s relationship with the infant mortality rate. Holding the Median age and GDP - per capita at a constant level, for every percentage increase in obesity rate the country’s infant mortality rate seem to decrease by 1.3%. Further examination shows that obesity rates are higher in developed nations where higher quality healthcare is available there by lowering infant mortality rates.

At first glance the Median age seems to have the biggest influence on the infant mortality rate. But when looking at the range of values for each variable GDP - per capita has the biggest impact in lowering the infant mortality rate of a given nation.