# Factors influencing life expectancy globally

Life expectancy is a key parameter that reflects the well-being of people and countries across the world are constantly trying to address areas that improve it. There are several factors such as socio-economic, lifestyle habits, healthcare facilities and population density which impact the human health. In this case study we use the dataset by World Health organization and United Nations for 193 countries between 2000 to 2015 with 20 attributes.

The ultimate goal of the analysis is to predict life expectancy and suggest factors that should be addressed to improve it. The data will be pre-prepossessed to remove anomalies, fill in the missing data. Further, we will use techniques of linear and polynomial regression to

(1) predict average life expectancy using the given variables,

(2) Study the correlation of these factors with life expectancy and with themselves,

(3) Study trends over the years from 2000 to 2015 and understand what has affected life expectancy positively,

(4) Find out which variables explain the life expectancy trends sufficiently? Does schooling, income levels, population density, immunization, smoking etc. have positive or negative effect on life expectancy and how strongly are these correlated?

This will help countries and individuals to formulate focused strategies to improve the life expectancy.

Reference: <https://www.kaggle.com/kumarajarshi/life-expectancy-who>