Projective Cancer Mortality Model for China

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OBJECTIVE

- We have a dataset of deaths by cancer in China from 1990-2014.

- *What is the projection of deaths by cancer by 2050?*

- *What is the relationship between life expectancy vs deaths by cancer in China?*

- Audience: China's general population, medical doctors and pharmaceutical companies.

METHODOLOGY

- We assumed our projection is a constant growth model.
- We found our data on cancer death rate on ourworlddata.org/cancer and turned it into .csv for computation.
- We found more data for life expectancy of china from Wikipedia "Demographics of China" which is also turned into .csv file.
- We used TimeSeries() in our simulation to project the death rate by cancer by 2050. We sweep both parameters which are life expectancy and deaths by cancer to answer our secondary question.

RESULTS

- The first graph explains our constant projection model which shows a constant downward slope by 2050.

- The second graph is generated by sweeping both parameters which explains: as deaths by cancer decreases, life expectancy increases in china.
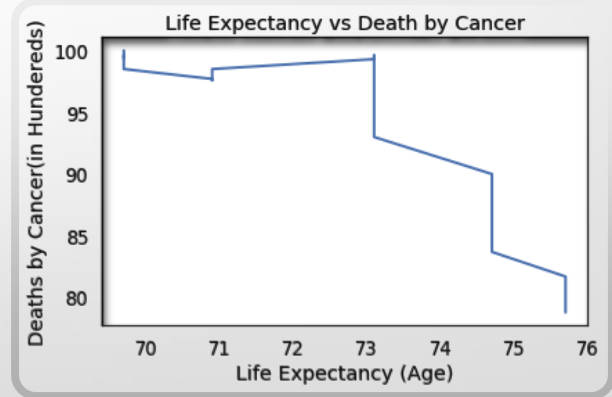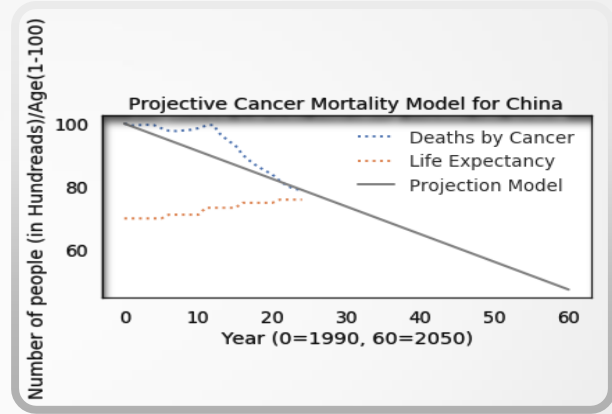
CONCLUSION

- Our projective model actually works, since it is showing there will be less deaths in the future by cancer just like the dataset suggested.

- The relationship between life expectancy and deaths by cancer also makes sense, since there are less deaths, the life expectancy increases.

- The limitations of this model is that it only takes the parameters from the data given, it doesn't take in consideration of other factors that might happen.