

Belen Gutierrez

12/10/23

Final Project Data Summary

The data examined was a dataset of mothers, statistics about their health, and their risk of dying during childbirth. The health statistics were their age, blood pressure, blood sugar, and heart rate. Their risk was then assessed as either low, mid, or high.

The tools used were Python and its pandas, matplotlib, and seaborn libraries.

The questions that were asked include: does age have an impact on blood pressure and whether high blood pressure or low blood pressure increased mortality risk the most. Additionally, there were also the questions of: does having a high body temperature correspond with a fast heart rate, does blood pressure or heart rate impact risk more, and does a higher age at childbirth increase mortality risk?

After analyzing the data, a correlation was found between age and blood pressure. It will be explained further in the presentation, but a higher age was correlated with higher blood pressure. Similarly, few of the people with low blood pressure had a high risk level. There seemed to be no correlation between high body temperature and fast heart rate. The mortality risk from heart rate and blood pressure was analyzed using two boxplots. This analysis showed that high blood pressure was more likely to correspond to high risk than heart rate. Finally, age was somewhat varied for people with high risk, but most of the people with low risk were around 30 years old or younger.

It seems that the factors that influence mortality risk the most is high blood pressure and advanced age. This is further compounded by the fact that, at least in western societies, blood

pressure increases as one ages. I would recommend discouraging postmenopausal women from having children. I would say ban, but it does not feel fully right to completely prevent someone from having children if they could not find the time for doing so before.

I would like to analyze how blood sugar affects the other factors. Also, I would like to find a similar dataset that includes more details about the mother, such as whether or not they did in-vitro fertilization or whether or not they had a c-section.