

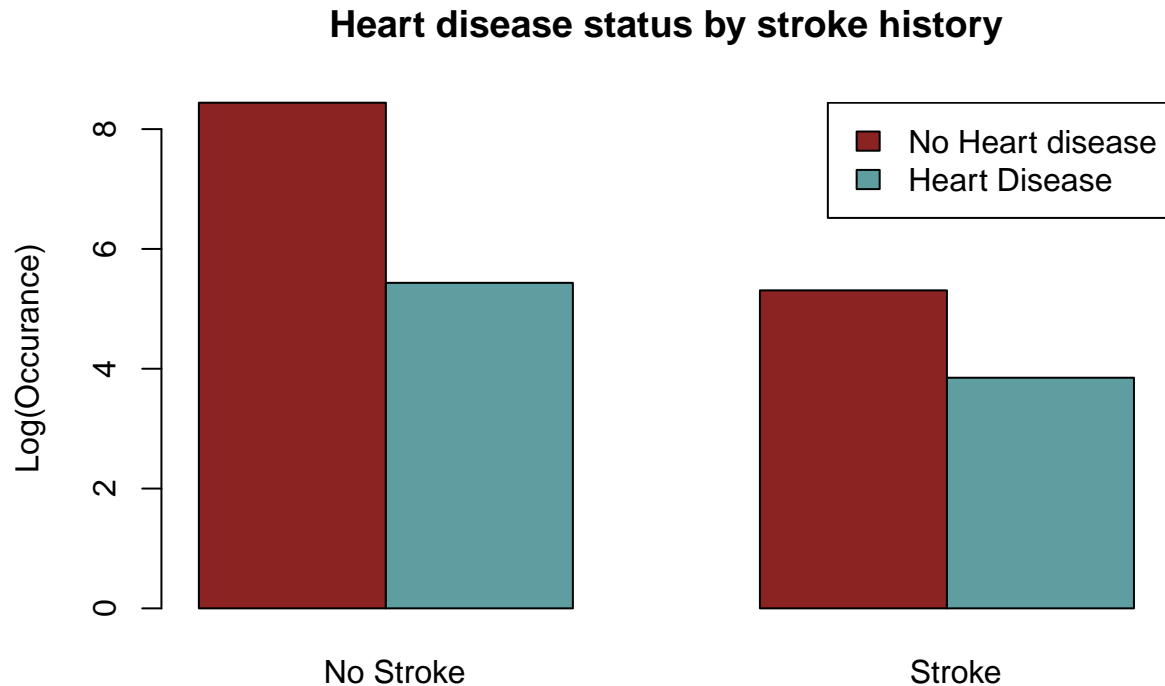
Given 10 attributes, how do they compare in predicting the chances
of a person's risk of a stroke?

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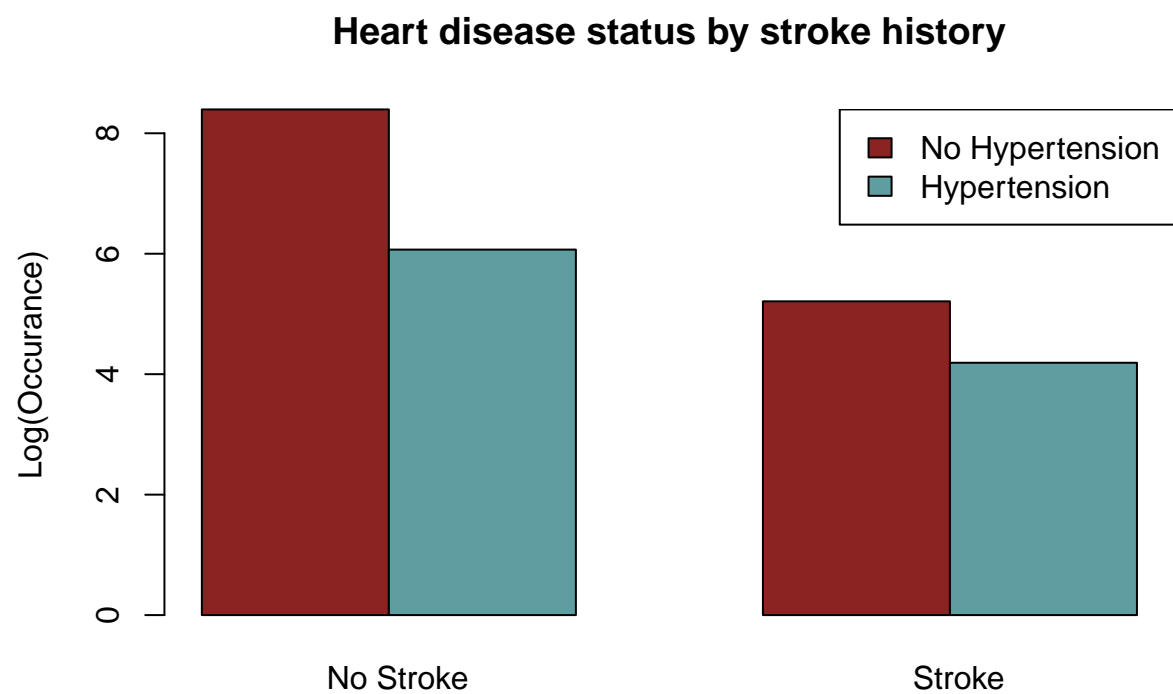
Results

Following the analysis of the dataset and the attributes within, some important correlations can be observed. Correlations relevant to the research question mostly consist of heart and health attributes. The first plot regarding heart disease differences in non-stroke and stroke patients will be shown.



This plot of normalized data shows that there are proportionally more heart disease patients in the stroke group, than there are in the no stroke group. This ratio can be translated to a percentage. The percentage of patients who have not had a stroke is 4.71%. This percentage is higher for the group of patients who have experienced a stroke. For that group the percentage is 18.88%. This means that it is 4 times as likely for someone who has had a stroke, to also have a heart condition. The literature on this subject seems to have come to a common consensus: There is a correlation between having a heart disease and a higher risk of a stroke, This paper published by the American Heart Association being one of the bigger published works on the topic: Heart Disease and Stroke Statistics—2020 Update: A Report From the American Heart Association (Keep in mind, the risk of developing heart disease AFTER a stroke is also quite big.)

The same can be seen in the case of hypertension, because that is also a heart condition.



This plot is very similar to the prior one. That makes sense, because quite some heart conditions are accompanied by hypertension. Hypertension on its own is already classified as a heart condition too.