Stroke Prediction

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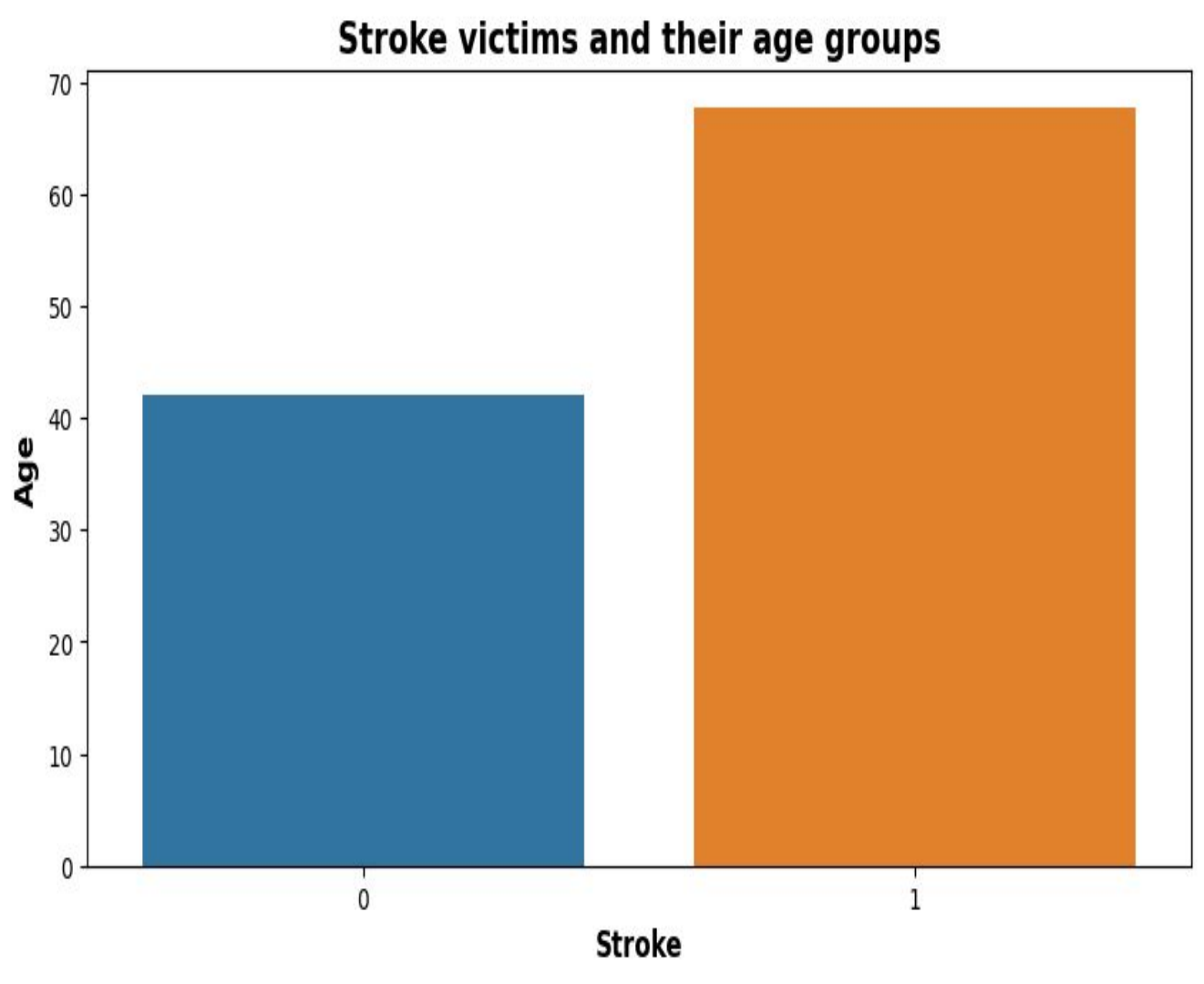
Business Problem

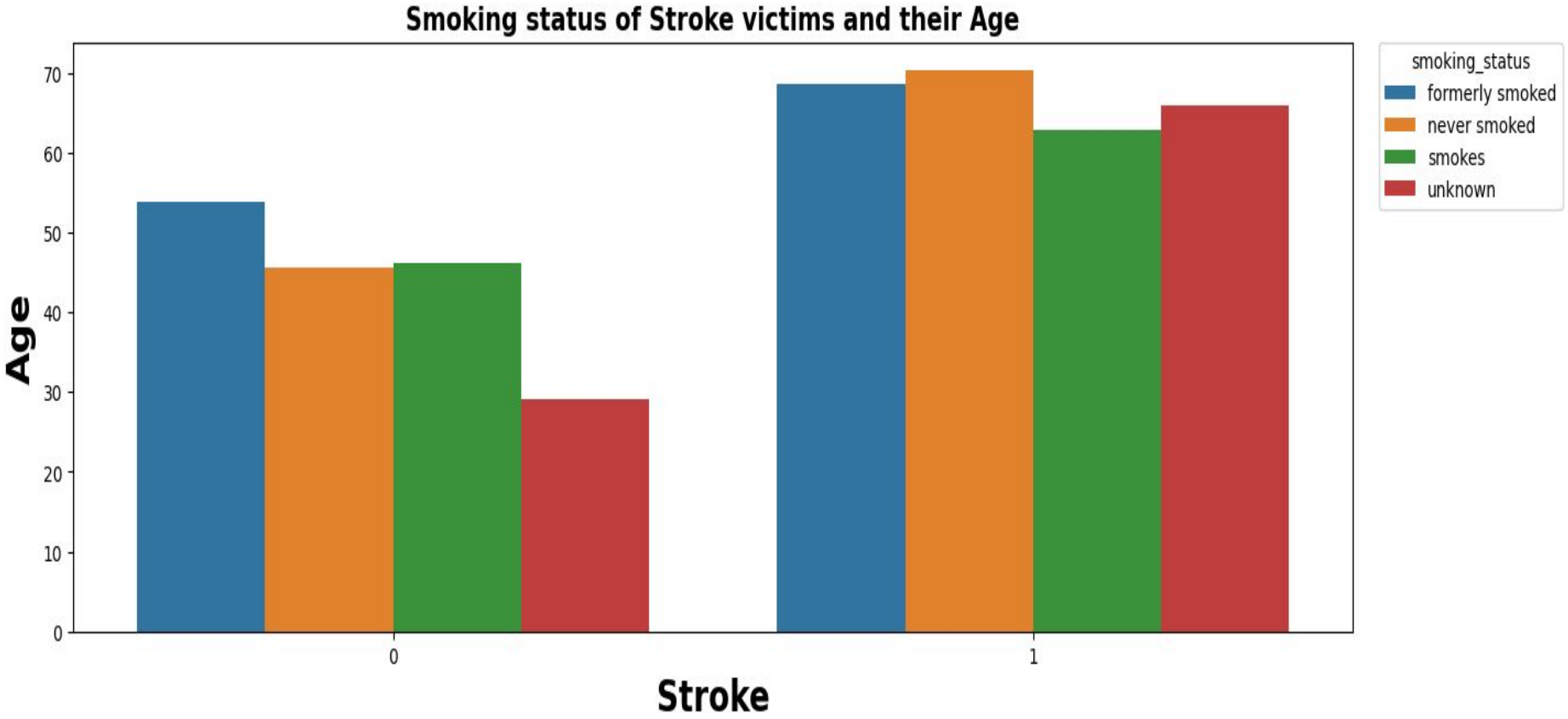
According to the World Health Organization (WHO) stroke is the 2nd leading cause of death globally, responsible for approximately 11% of total deaths.

The goal of this work is to help predict whether a patient is more likely to get a stroke based on determining factors such as age, gender, various diseases, etc.



This graph shows the average age groups of healthy people vs stroke victims.

The graph showed that one of the biggest factors in whether someone is likely to get a stroke is in fact there age


Smoking status of Stroke victims and their Age
Age
70
60
50
40
30
20
10
0
0
1
Stroke
smoking_status
formerly smoked
never smoked
smokes
unknown

The purpose of this graph was to show that no matter the smoking status of the person, their age is still the biggest determining factor even if they have never touched a cigarette.

Strengths and weaknesses of my Model

Strengths:

- My model was able to combine all the data and was able to identify stroke victims with a 93% accuracy score.
- My research does show that the single greatest determining factor is the person’s age.

Weaknesses:

- With age being the main factor and with that being out of our control, it does not seem like there is a full proof way to prevent strokes from occurring .

In Conclusion

I believe my work has answered the problem which is that Age is the biggest determining factor in predicting if a patient is more likely to get a Stroke and that we should focus on that age group.