Data Science Bootcamp

Project MVP

11 clinical features for predicting stroke events

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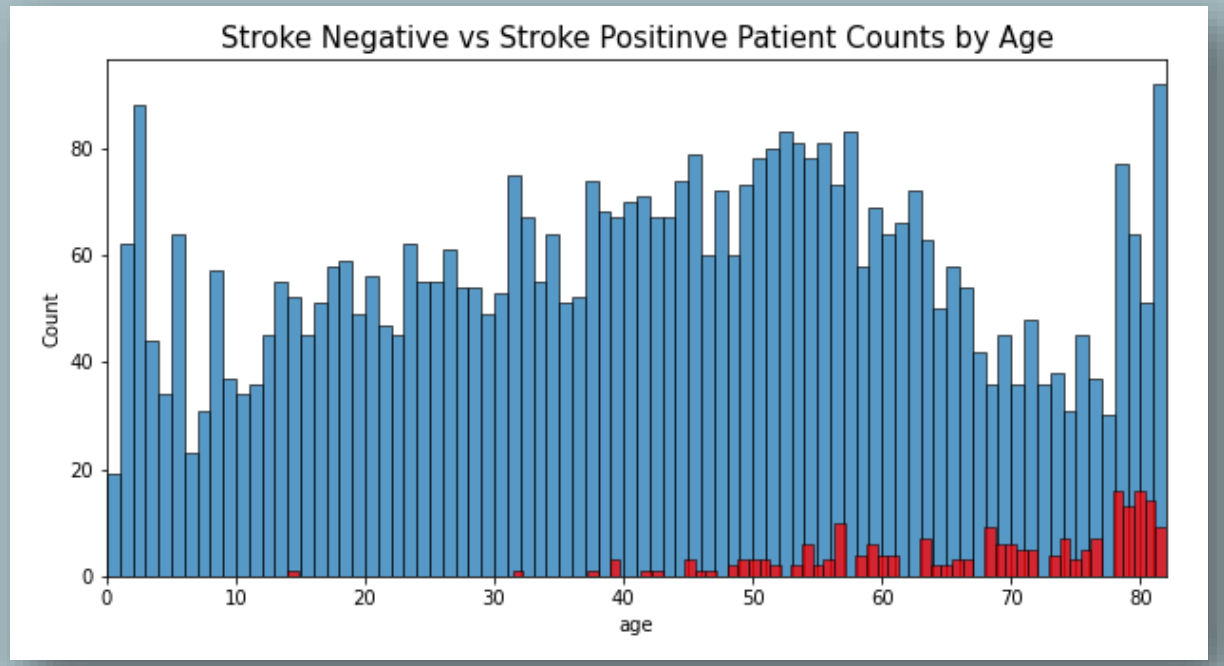
❑ In my Project

•**I am focusing on** understanding the reasons that may cause stroke to people and find out if we can successfully detect stroke depends on specific features using machine learning tools and techniques.

•**By the end of this project, we should be able to predict if a person is more likely to have stroke depends on some features such as:** age, gender, body mass, smoking, blood pressure, heart disease, marriage status, working type, residence type..etc


MVP

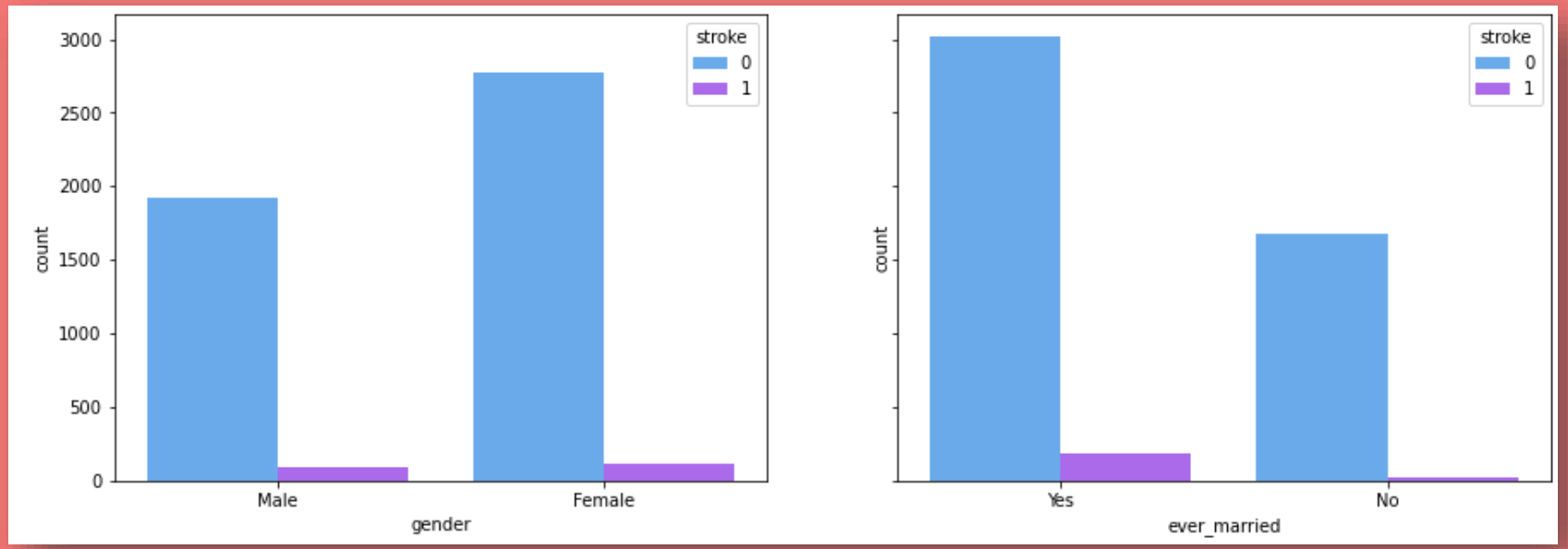
Visualize age and stroke correlation.



According to the above plot, we have balanced age distribution in stroke negative group.
But stroke positive patients are stacked to the right (Older people have higher rate of stroke).

(Gender VS Stroke rate)

(Marriage status VS Stroke rate)

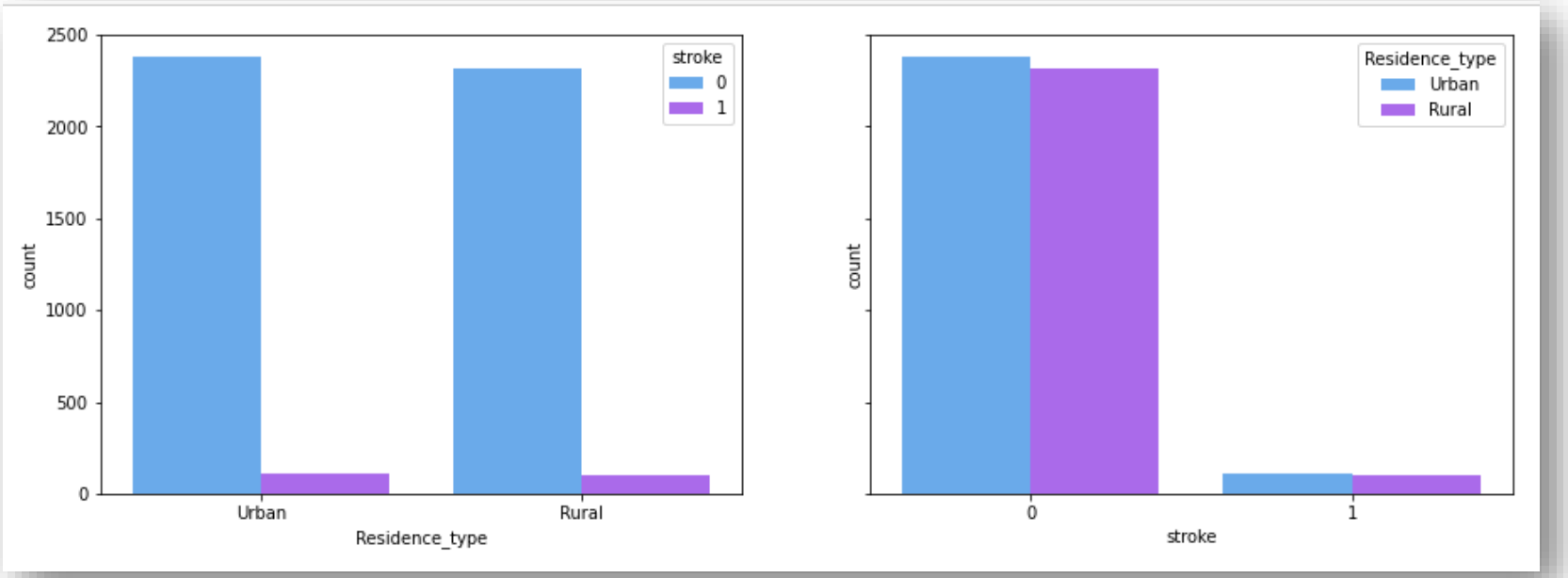


The result with married people is kinda funny ☺. The rate of stroke is higher in married people :) but this may be a result of bias :/ LOL

we also could say that females have a little higher rate of stroke than male "but the contribution of females is more than males in this dataset". So this is not a certain result.

Relation between Residence_type and the rate of stroke

First plot shows that the numbers and rates of stroke and non-stroke patients are very similar in both localization types. The second plot also supports this.

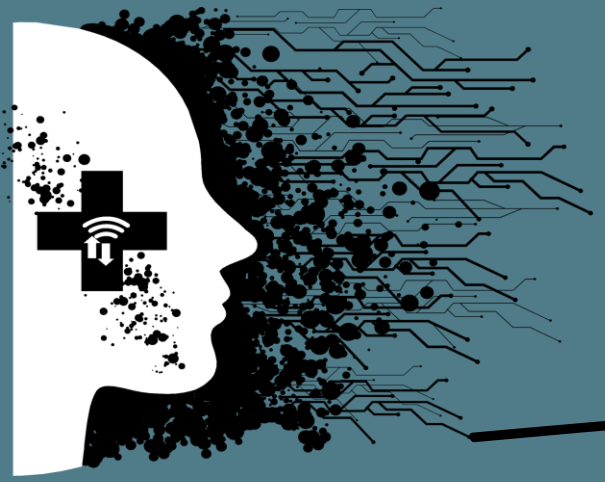


Questions that are already answered by the EDA but not certain about the results :

1. Are older people more likely to have stroke?
2. Do smokers tend to have stroke in the future more than non-smokers?
3. As a female wanting to know if I am more likely to have stroke than males?
4. will living in a city affect the potentials to have stroke more than living in suburbs?

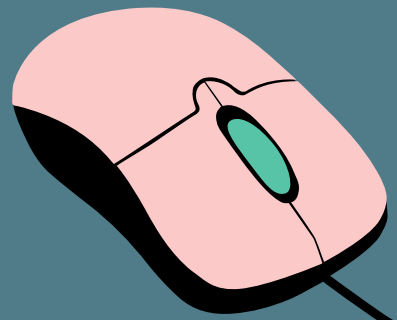
Questions that are not addressed yet and need to be studied more:

1. Will your health condition “body mass, hypertension, heart disease, glucose level” put you at risk of having stroke?



Thank You

I wish you enjoyed my work ☺



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