

# Estimation of Medical Charges

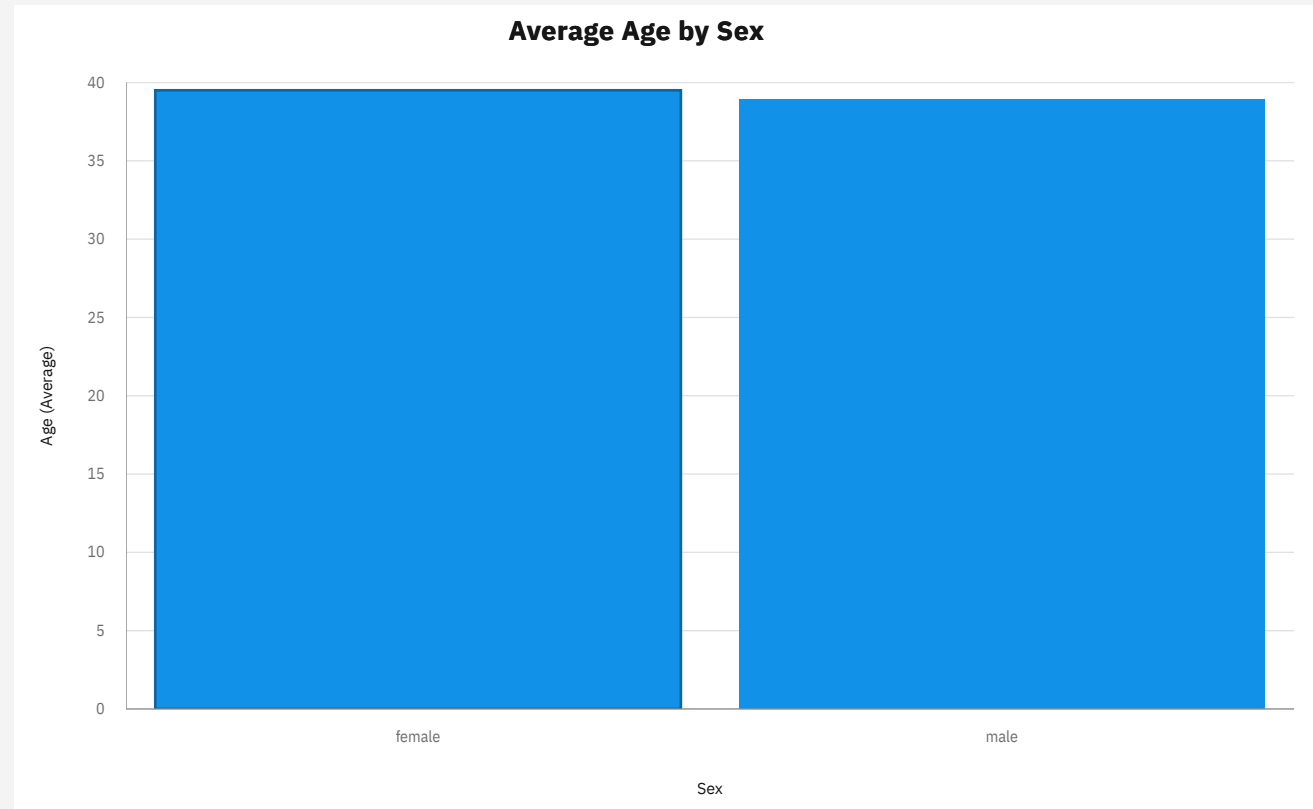
## Medical Care Costs Story

# Average Age by Gender

This graph gives us the average age by sex

The average age of women is higher than men.

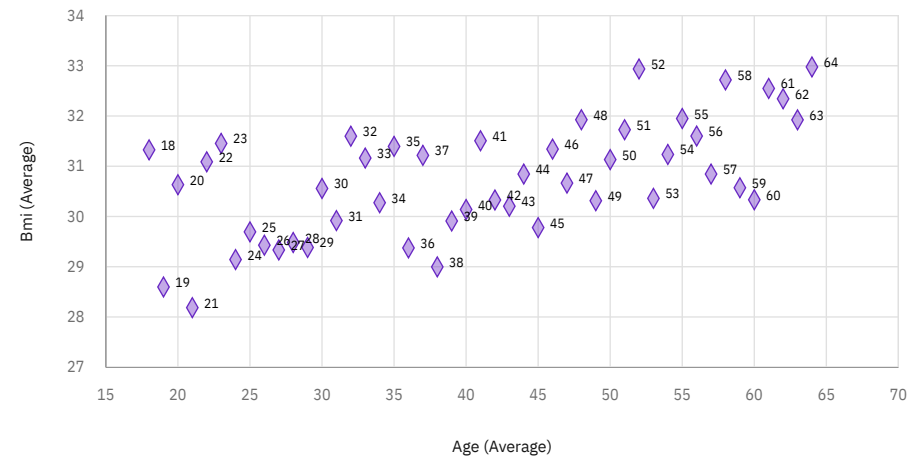
It is also worthy to note that, the no of women in the given dataset is less.



# BMI of person based on age

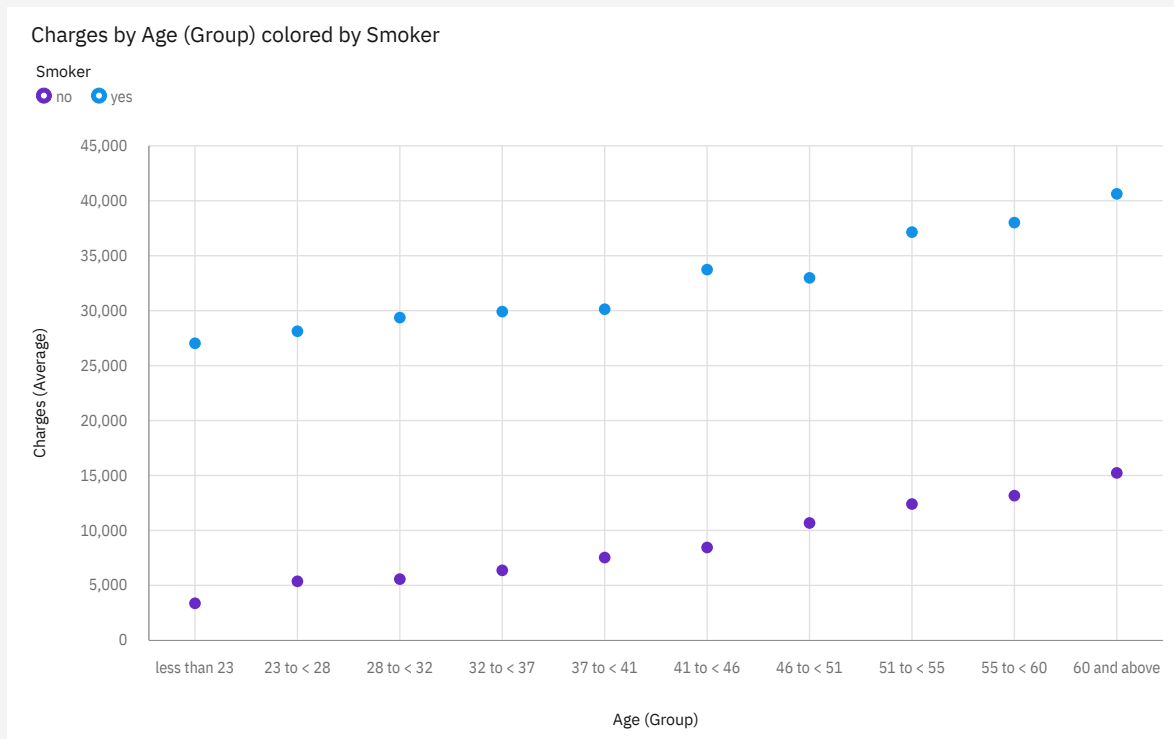
- This graph gives the BMI comparison with respect to the age.
- As age increases the average bmi also increases.
- There are some abnormalities here and there but the general trend is given above.
- This gives a linear representation between the bmi of a person and the age of a person.

Age by Bmi with points for Age



# Charges by Age and impact of Smoking

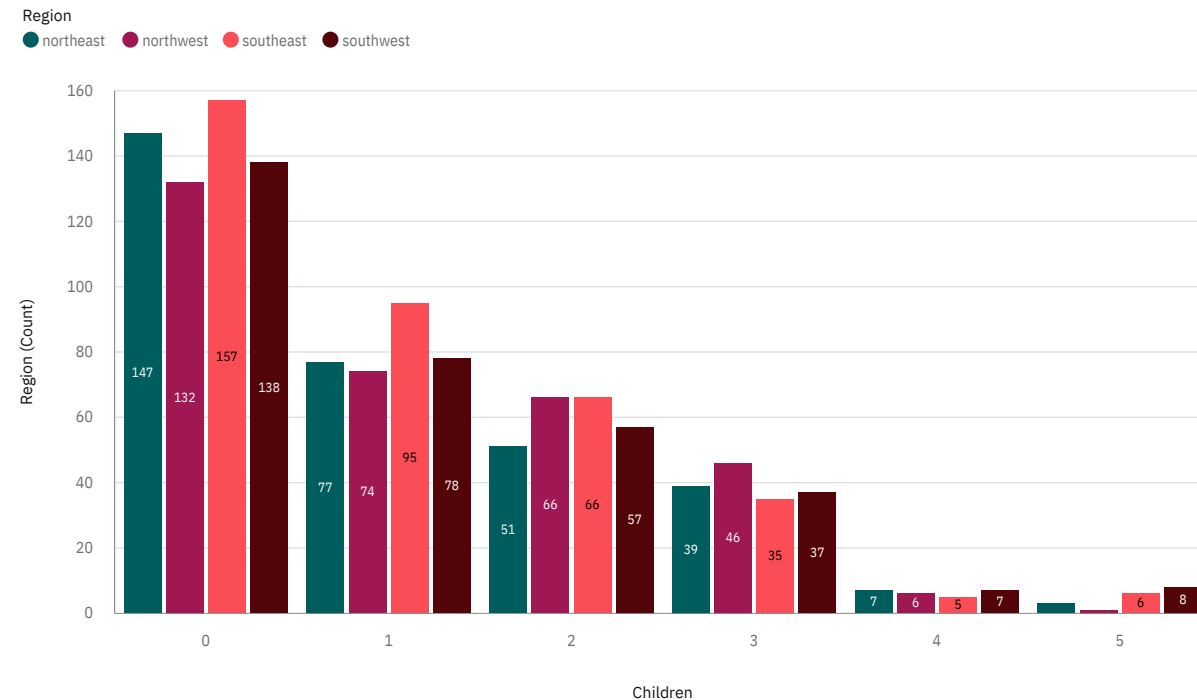
- The graph represents so much.
- One can see a slightly linear relationship between the age and charges.
- This can be explained with the increasing no of tests and care the older age people need.
- One important thing to note is that, the charges increase by 5x when the person is a smoker.
- This is also justified as smoking would increase the no of health problems especially related to the heart and the lung.
- This is true for all ages.



# Region by Children

- One can see the no of people who do not have kids is high in all regions.
- Southwest region is the highest with the most no of no kids.
- Most of the parents who have kids have them in the count of 1-3.
- Above 4 is very rare, and only a few of them could be seen.

Region by Children colored by Region



# Charges with respect to Age, Gender and Region

- The charges as expected are high for smoking
- The charges are comparatively high for men as well.
- South east region smokers are the ones who pay more
- The size is so small for people who don't smoke
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