

Here are the main purpose of assignment:

- 1) Generate a media item that in some way communicates numerical findings.
- 2) In a presentation, justify the "how" and "why" you made the media. It will be important here to do whatever you can to demonstrate understanding of the course content. It is advised that you justify any tests that you perform. Talk about data structure, where it came from, bias, wrangling issues, checking test assumptions, interpretations, caveats, etc.

And here are 3 questions to focus on (Please not many words, focus on graph - ((code and explanation why we use those))

Dataset: <https://www.kaggle.com/rashikrahmanpritom/heart-attack-analysis-prediction-dataset>

Questions:

1. The relation between the gender/age and the rate of cholesterol.
 - Ex1: *Both total **cholesterol** and LDL **cholesterol** were higher in women over 50 years compared with men of the same **age**, although not significantly so. HDL2 **cholesterol** was significantly higher in women than in men (overall, $p < 0.01$; < 50 years, $p < 0.02$).*

(<https://www.ahajournals.org/doi/pdf/10.1161/01.ATV.12.8.955>)

- Ex2: *When men and women were compared, associations between the measures of obesity and blood lipids were stronger in men than in women of the same age, except for the associations between measures of abdominal obesity and VLDL or triglycerides in 45-year-old women. => No age trend was found for associations between the measures of obesity and VLDL or triglycerides, whereas young age-groups showed stronger associations between obesity and total cholesterol than older age-groups.*

(<https://pubmed.ncbi.nlm.nih.gov/1619448/>)

2. Does the high rate of cholesterol increase the risk of having a heart disease and stroke?
 - Ex1: Several health conditions, your lifestyle, and your age and family history can increase your risk for heart disease and heart attack

(https://www.cdc.gov/heartdisease/heart_attack.htm)

- There are a number of risk factors for developing ischaemic heart disease. Some of these are not preventable, and include older age and a family history of the disease. However, most risk factors are modifiable, such as smoking, high blood pressure and cholesterol,

diabetes, physical inactivity, being overweight, excessive alcohol consumption and poor diet (particularly through its negative impact on weight, cholesterol and blood pressure)

<https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Main+Features100012015?OpenDocument>

3. Does a high resting blood pressure increase the risk of a patient to have a heart attack?