

IBD health

Ahmed Ayman

July 14, 2021

- Introduction
- Dataset
- Q1: show the age of participants and BMI
- Q2: Which type of IBD tends to have sufferers of a higher BMI?
- Q3: Which type of IBD has more sufferers that smoke or previously smoked?
- Q4: Which type of IBD has more cancer sufferers?
- Q5: Which type of IBD has more heart disease sufferers?
- Q6: Which age group is most affected by Ulcerative colitis (diagnosis type 2 in the dataset)

I received a task asking me to analysis data for inflammatory bowel disease patients.
The task asked me to answer some questions

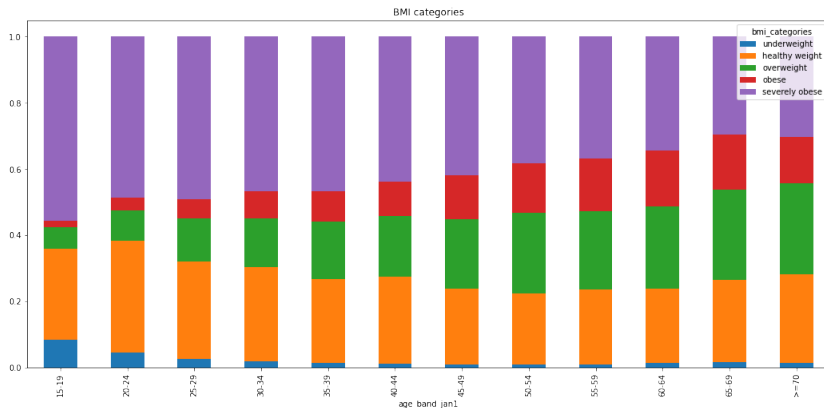
- 1 show the age of participants and BMI
- 2 Which type of IBD tends to have sufferers of a higher BMI?
- 3 Which type of IBD has more sufferers that smoke or previously smoked?
- 4 Which type of IBD has more cancer sufferers?
- 5 Which type of IBD has more heart disease sufferers?
- 6 Which age group is most affected by Ulcerative colitis (diagnosis type 2 in the dataset)

The data contains information about 33K patients The data columns as follow

- pt-ID: unique ID for each patient
- gender: integer value indicates the gender of each patient
 - 1 means male
 - 2 means female
- diagnosis: integer value indicates the type of IBD
 - 1 means Crohn's
 - 2 means UC
 - 3 means Unspecified
 - 4 means Other
- hosp-admin: integer value indicates if the patient recorded in a hospital or not
- age-band-jan1: the age value for each patient
- bmi: contains the body mass for each patient
- smoker: is the patient smoker or not
- past-smoker: is the patient was smoker or not
- diet-preference: which diet the patient follows
- cancer: is the patient has cancer or not
- heart-disease: is the patient has heart disease or not

Q1: show the age of participants and BMI

Please keep in mind this is just a **descriptive statistics**

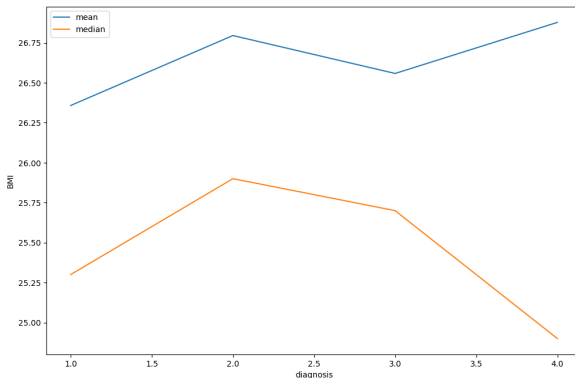


Just understand the data, but **don't** make any conclusions

Q2: Which type of IBD tends to have sufferers of a higher BMI?

IBD types:-

- 1 means Crohn's
- 2 means UC
- 3 means Unspecified
- 4 means Other

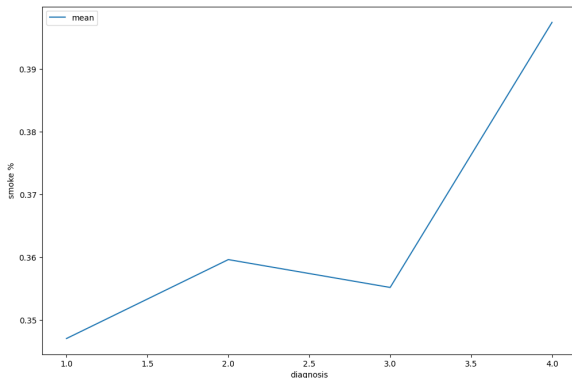


Type 2 (UC): has the BMI
Type 4: effect by outliers

Q3: Which type of IBD has more sufferers that smoke or previously smoked?

IBD types:-

- 1 means Crohn's
- 2 means UC
- 3 means Unspecified
- 4 means Other

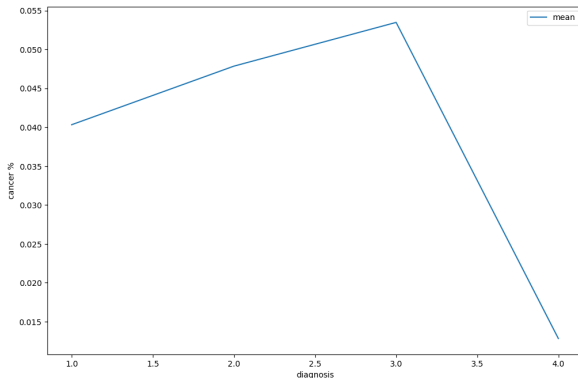


Type 4: has the highest smoking percentage

Q4: Which type of IBD has more cancer sufferers?

IBD types:-

- 1 means Crohn's
- 2 means UC
- 3 means Unspecified
- 4 means Other

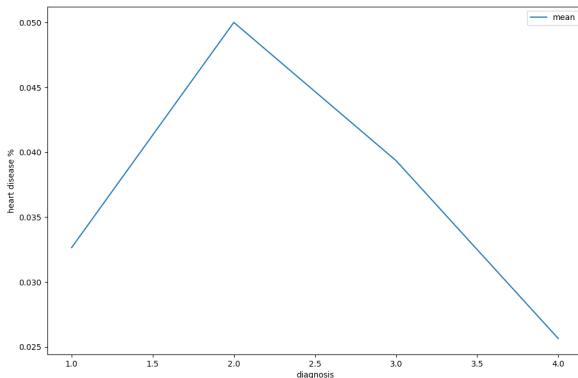


Type 3: has the highest cancer percentage

Q5: Which type of IBD has more heart disease sufferers?

IBD types:-

- 1 means Crohn's
- 2 means UC
- 3 means Unspecified
- 4 means Other



Type 2: has the highest heart disease percentage

Q6: Which age group is most affected by Ulcerative colitis?

gender types:-

- 1 means Male
- 2 means Female

