UCL

INSTITUTE FOR EPIDEMIOLOGY AND HEALTH CARE

IEHC0046

Basic Statistics for Medical Sciences

Cover Sheet

2019/20

|  |
| --- |
| CANDIDATE NUMBER:  JCZZ8 |
| SUMMATIVE ASSESSMENT TITLE:  **Statistical Analysis of the Association Between Hypertension and Gender and BMI and Gender** |

Tab gender hypert, row

Power twoproportions 0.1986 0.1573 p(0.9) alpha(0.05)

Tab gender

Sum search mdesc

Mdesc

Tab gender

Sum age if gender==1

Sum age if gender==2

Tab had1

Tab ms

Tab hab1

Sum age, detail

Histogram age

Sum bmi, detail

Histogram bmi

Sum smoking, detail

Histogram smoking

Sum educ\_years, detail

Histogram educ\_years

Tab gender, row

Tab ethnic gender, row

Tab edugp gender, row

Tab age\_cat gender, row

Tab bmi\_cat gender, row

Tab smoking\_cat gender, row

Tab had1 gender, row

Tab ms gender, row

Tab poverty4 gender, row

Tab perio gender, row

Tab haf10 gender, row

Tab hab1 gender, row

Tab haq1 gender, row

Tab hypert gender, row

Tab had1

Tab ms

Tab hab1

Sum age, detail

Histogram age

Sum bmi, detail

Histogram bmi

Sum smoking, detail

Histogram smoking

Sum educ\_years, detail

Histogram educ\_years

Tab gender, row

Tab ethnic gender, row

Tab edugp gender, row

Tab age\_cat gender, row

Tab bmi\_cat gender, row

Tab smoking\_cat gender, row

Tab had1 gender, row

Tab ms gender, row

Tab poverty4 gender, row

Tab perio gender, row

Tab haf10 gender, row

Tab hab1 gender, row

Tab haq1 gender, row

Tab hypert gender, row

Tab gender hypert, row

Tab age hypert, row

Tab educ\_years hypert, row

Tab smoking hypert, row

Drop if bmi>60

sum if bmi>29.9

sum if bmi<18.4

sum if bmi<25 & bmi>18.3

sum if bmi<30 & bmi>24.9

Drop dentins

Drop if ms==.

Drop if poverty4==.

Drop if perio==.

Drop if haq1==.

Drop if haf10==.

Drop if had1==.

Drop if edugp==.

Tab ethnic

Tab ethnic hypert, row

tab had1

tab had1 hypert, row

Tab agegp

Tab agegp hypert, row

Tab ms

Tab ms hypert, row

Tab edugp

Tab edugp hypert, row

Tab poverty4

Tab poverty4 hypert, row

Tab perio

Tab perio hypert, row

Tab haq1

Tab haq1 hypert, row

Tab haf10

Tab haf10 hypert, row

Tab hab1

Tab hab1 hypert, row

Tab educ\_years\_cat

Tab educ\_years\_cat hypert, row

Tab smoking\_cat

Tab smoking\_cat hypert, row

Tab bmi\_cat

Tab bmi\_cat hypert, row

Tab educ\_years

Gen educ\_years\_cat=educ\_years

Recode educ\_years\_cat min/5=0 6/11=1 12/max=2

Label var educ\_years\_cat “years of education categories”

Label define educ\_years\_catlab 0 “up to 5 years of education” 1 “6-11 years of education” 2 “12-17 years of education”

Label values educ\_years\_cat educ\_years\_catlab

Tab educ\_years\_cat

Generate smoking\_cat=smoking

Recode smoking\_cat 0=0 1/19=1 20/max=2

Label var smoking\_cat “number cigarettes/day categories”

Label define smoking\_catlab 0 “none” 1 “1-19 a day” 2 “20 or more a day”

Label values smoking\_cat smoking\_catlab

Tab smoking\_cat

Generate bmi\_cat=bmi

Recode bmi\_cat min/18.3=0 18.4/24.9=1 25/29.9=2 30/max=3

Label var bmi\_cat “bmi categories”

Label define bmi\_catlab 0 “underweight” 1 “normal weight” 2 “overweight” 3 “obese”

Label values bmi\_cat bmi\_catlab

Tab bmi\_cat

Generate age\_cat=age

Recode age\_cat min/30=0 31/64=1 65/max=2

Label var age\_cat “age categories”

Label define age\_catlab 0 “up to 30 years old” 1 “31-64 years old” 2 “65 and older”

Label values age\_cat age\_catlab

Tab age\_cat

Tab age\_cat hypert, row chi

Tab ethnic hypert, row chi

Tab gender hypert, row chi

Tab educ\_years\_cat hypert, row chi

Tab had1 hypert, row chi

Tab smoking\_cat hypert, row chi

Tab agegp hypert, row chi

Tab ms hypert, row chi

Tab edugp hypert, row chi

Tab poverty4 hypert, row chi

Tab perio hypert, row chi

Tab bmi\_cat hypert, row chi

Tab haf10 hypert, row chi

Tab hab1 hypert, row chi

Tab haq1 hypert, row chi

Tab agegp hypert if gender==1, chi

Tab agegp hypert if gender==2, chi

Tab educ\_years\_cat hypert if gender==1, chi

Tab educ\_years\_cat hypert if gender==2, chi

Tab ethnic gender, row chi

Tab educ\_years\_cat gender, row chi

Tab had1 gender, row chi

Tab smoking\_cat gender, row chi

Tab agegp gender, row chi

Tab ms gender, row chi

Tab edugp gender, row chi

Tab perio gender, row chi

Tab haq1 gender, row chi

Tab bmi\_cat gender, row chi

Tab haf10 gender, row chi

Tab hab1 gender, row chi

Tab hypert gender, chi

Mhodds hypert gender

Mhodds hypert ethnic

Tab gender ethnic, chi

Mhodds hypert gender, by(ethnic)

Mhodds hypert gender, by(smoking)

Mhodds hyper gender, by(edugp)

Mhodds hyper gender, by(bmi)

Generate perio\_cat=perio

Recode perio\_cat 0=0 ½=1

Label var perio\_cat “perio\_binary”

Label define perio\_catlab 0 “mild or no periodontal” 1 “moderate to severe periodontal”

Label values perio\_cat perio\_catlab

Mhodds hyper gender, by(perio\_cat)

Mhodds hyper gender, by(bmi)

Mhodds hyper gender, by(haf10)

Mhodds hyper gender, by(hab1)

Mhodds hyper gender, by(had1)

Generate agegpbi=agegp

Recode agegpbi 1/2=0 3/4=1

Label var agegpbi “age binary”

Label define agegpbilab 0 “44 and younger” 1 “45 and older”

Label values agegpbi agegpbilab

Mhodds hyper gender, by(agegpbi)

Mhodds hyper gender, by(ms)

Mhodds hyper gender, by(haq1)

Mhodds hypert gender hab1, by(perio agegp)

Oneway bmi gender, tab

Oneway bmi ethnic, tab

Oneway bmi edugp, tab

Oneway bmi agegp, tab

Oneway bmi smoking, tab

Oneway bmi had1, tab

Oneway bmi ms, tab

Oneway bmi poverty4, tab

Oneway bmi perio, tab

Oneway bmi haf10, tab

Oneway bmi hab1, tab

Oneway bmi haq1, tab

Oneway bmi hypert, tab

Sum hypert

Sum age

Corr hypert gender

Regress hypert gender

Twoway (scatter hypert gender) (line regressionline gender)

Regress bmi gender

Regress bmi ethnic

Regress bmi age

Regress bmi edugp

Regress bmi had1

Regress bmi smoking

Regress bmi ms

Regress bmi poverty4

Regress bmi perio

Regress bmi hypert

Regress bmi haf10

Regress bmi hab1

Regress bmi haq1

Predict resid, residuals

Kdensity resid, normal

Regress bmi gender ethnic

Regress bmi gender ethnic, beta

Regress bmi gender ethnic age

Regress bmi gender ethnic age, beta

Regress bmi gender ethnic age educ\_years, beta

Regress bmi gender ethnic age educ\_years had1

Regress bmi gender ethnic age educ\_years had1 smoking

Regress bmi gender ethnic age educ\_years had1 smoking, beta

Regress bmi gender ethnic age educ\_years had1 smoking hypert

Regress bmi gender ethnic age educ\_years had1 smoking hypert, beta

Regress bmi gender ethnic age educ\_years had1 smoking hypert haf10

Regress bmi gender ethnic age educ\_years had1 smoking hypert haf10, beta

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1, beta

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1 poverty4

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1 poverty4, beta

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1 poverty4 haq1

Xi:regress bmi gender ethnic age educ\_years had1 smoking hypert haf10 hab1 poverty4 haq1 beta

Xi:regress bmi i.gender\*age

Xi:regress bmi i.gender\*haf10

Xi:regress bmi i.gender\*haf10, beta

Xi:regress bmi i.gender\*hab1

Xi:regress bmi i.gender\*hab1, beta