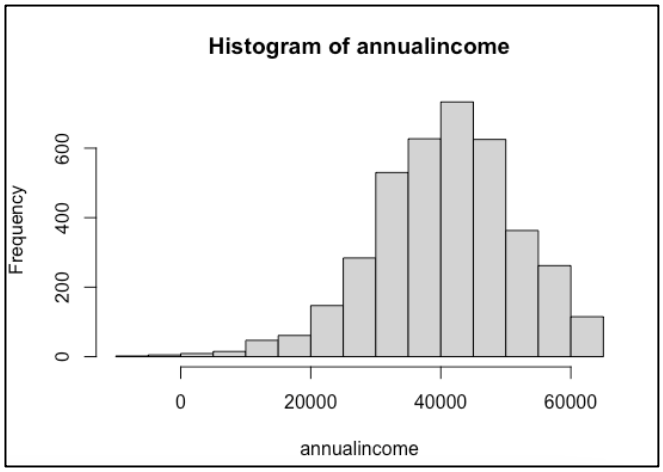
**Amanee Faddoul**
**EC 339.001**
**Exam 1**

**DATA WORK**

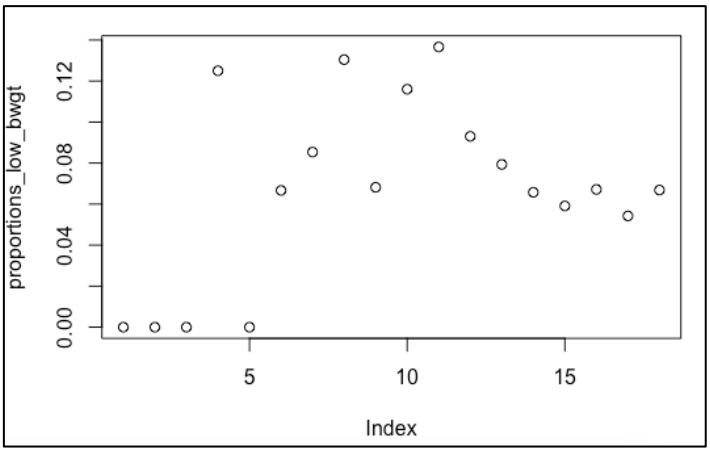
1) Histogram




2) DO FILE
3) Education gradient:
4) DO FILE
5)

```
 [1] 0.00000000 0.00000000 0.00000000 0.12500000 0.00000000 0.06666667
 [7] 0.08536585 0.13043478 0.06818182 0.11602210 0.13661202 0.09302326
[13] 0.07935223 0.06574394 0.05910165 0.06716418 0.05423729 0.06685237
```

6)




7) DO FILE
8) coefficient of *beta* = 0.088333
9) point estimate of *gamma* = 0.786963
10) When we compare questions 6 and 9, we can assume that regardless of a mother's education status, it does not impact whether their child has a low birthweight. They are independent of one another.

11) The better specification would be with only the one variable of "aboveHS" because the beta is more significant with only one variable rather than the two variables of "aboveHS" and "annualincome"

**LECTURES**

1)

a) From the given information, we can determine that because *beta* > 0, those with insurance typically have shown to visit the doctor more frequently. However, we cannot assume causality that the reason behind why these people increased their doctor's visits is solely because they have insurance.

b) As mentioned above, we cannot assume causality because we are unable to determine due to their possession of insurance. However, we can see that because *beta* > 0, there is a correlation between number of doctor visits and insurance.

c) We can state that the demand for doctor visits is downward sloping because we are able to conclude that as price decreases (more people are insured), the more frequent doctor visits become.

2)

a) This suggests that between those who receive "treatment"/are insured and number of doctor visits have a positive correlation causing there to be a downward slope in the demand curve.

b) Although we can assume positive correlation, we cannot determine causality because *beta* shows only the relationship between those who received "treatment" and the number of doctor visits.

c) Along with answer b, we can see a clear correlation between the 25 people who received treatment, however, we cannot determine that there is causality in this situation. We cannot determine that the sole reason behind increased doctor visits is because of the possession of insurance.

d) The Oregon Health Insurance experiment aims to determine whether Medicaid coverage benefits individuals. The study used a lottery system to selected people to be recipients of Medicaid and compares them to those who were not selected to receive Medicaid. This experiment was able to determine that Medicaid increased the amount of hospital visits while managing to decrease out of pocket costs for low-income adults.

**READINGS**

1)

a) A "quasi natural experiment" is one in which treatment is chosen based on social or political factors. Because of the age restriction and all the possible factors that go into the age requirement of 65 (retirement, higher necessity for medical insurance, etc.), the Card article highlights the aftereffects of Medicare and the impact of admission, emergency related or not. The method used in the reading is mainly selecting a group of patients whose hospital admissions is shown to be independent of their insurance status.

b) In the Card et al. reading, the selection problem is solved by "focusing on a subset of patients who are admitted through the ED for a relatively severe set of conditions that require immediate hospitalization" (pg. 6).

c)

i) Figure IV compares age at admission and their proportion with coverage and once the age hits 65, it is shown that there is a significant increase in overall insurance due to Medicare. Before the age of 65, the highest proportion with coverage were those who were privately insured and that was at approximately 0.48, whereas Medicare (after the age of 65) was about 0.78.
ii) Figure II describes the number of admissions in route to the hospital (California) and it is obvious that unplanned emergency department admissions significantly increase after the age of 65.
iii) Figure VI compares age at admission and death rate, and it is clearly visible that regardless of "death ___ days", once a person hits the age of 65, the death rate decreases. All the points show about the same decrease once people hit the age of 65.

d) One of the major limitations in this study was that Medicare has the potential to impact other "dimensions of health and other patient populations", however, this study focuses on "measuring the health effects of Medicare eligibility for a relatively sick population" (pg. 16 & 17).