

Safinaz Ali

Homework #6

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Article #1: Economic burden of maternal morbidity – A systematic review of cost-of-illness studies

URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6964978/>

Summary: Data being used is the National Health Interview Study and the Global Burden of Disease Study of 2017 which included pregnancy, doctor visits, insurance and much more about people's health conditions. Questions being addressed in this article is how maternal morbidity is creating an economic burden on society. Based on their conclusion they concluded that maternal morbidity is linked to high expenses for healthcare systems and society during pregnancy and after birth. The illnesses for which the most evidence is available for are depression, obesity, and gestational diabetes. These disorders are all linked to rising average treatment expenditures per woman as well as rising expenses for raising children whose mothers had these health issues according to the data. Some econometric techniques being used in the article from my understanding is that they divided the cross-sectional data into groups according to whether or not women had a certain morbidity, then compared expenditures between these groups. In which they created restricts and subsets to get multiple variables for different dependent and independent variables to test their hypothesis and classify if they should reject the null hypothesis or fail to reject it.

Article #2: Americans' Challenges with Health Care Costs

URL: <https://www.kff.org/health-costs/issue-brief/americans-challenges-with-health-care-costs/>

Summary: Data being used is the KFF health care debt survey which also includes many variables of people's insurances, and their sickness and how much they are paying. Questions being addressed is if the cost of health care affects U.S families. Based on their data and results, according to the KFF polls they used, the rising expense of healthcare burdens American families and influences their choices about insurance coverage and medical care. These expenses are also among the top financial concerns for many families. Adults without insurance, Black and Hispanic adults, adults over 65, and people with lower incomes are significantly impacted by high healthcare costs. According to the KFF research conducted in 2020 in this article, people's main financial concerns were unexpected medical expenditures, which were more concerning for people than stressing about being able to pay for other sorts of health care and essential costs like housing, electricity, and food. Some econometric techniques being used are running multiple tables and regressions to showcase different variables such as other expenses they can not afford and some predicted values such as more than half of people can not afford an unexpected medical bill of 500. By running multiple variables it helps give them multiple graphs and data to compare to get a more accurate conclusion.

Some other data I will look into will be focusing on maybe the private health insurance next week to see if there is a discrepancy between any demographic variables and health care. Also I'm just curious about after the pandemic has the health insurance changed any policy because of the overload during pandemic or have they taken advantage during the time to gain more money from people then help them during pandemic. There are a bunch of variables that I can play around with to get more accurate predictions for my future research.

Exam Question 1 Redo:

	EEDUC						
TWDDAYS	less than hs	some hs	HS diploma	some coll	assoc deg	bach deg	adv deg
had 1-2 telework days in past week	6	12	152	537	272	1439	1667
had 3-4 telework days in past week	3	10	108	395	174	1211	1348
had 5+ telework days in past week	12	22	328	1247	617	3205	2905
had no telework days in past week	246	551	4285	6977	3518	6637	5861
Sum	267	595	4873	9156	4581	12492	11781

Based on the data the proportion i'm going to focus on the hs degree separate and college degree separate so the sum of less than hs, some of hs and hs diploma that has 0 telework is (246+551+4285) is 5082 and i will divide that by the sum of teleworks days from 1-5 for that section is which is (21+44+588)653. Now to get a proportion you will do 653/5082 and get .12849. Now i'm going to do the same for some college, associate degree, bachelor degree and advanced degree. Which is (6977+3518+6637+5861) equal to 22993. The sum for telework days for people with some degree in college is (2179+1063+5855+5920) is 15017. Then it will be 15017/22993 and that will give you .65311.

So now with my two proportions is going to get run into a t.test to find the significance level. To do that we are going to do the proportion formula to see if there is correlation between the two $(p-p)/\sqrt{1-p/n}$ it will be $.65311-.12849/\sqrt{(1-.12849)/1/5735 + 1/38010}$. Based on that I was able to find a z score which was 75.1438. The value of p is $< .00001$. The result is significant at $p < .05$. The confidence interval I used was 95% to find out the significance level. We can assume that any college degree is way more significant than a hs degree which is not surprising. For my standard error I got 0.005 for both of my proportions which is why I said that having some degree is way more significant than not having one at all.

For the majority of the math I did it on excel and plugged it into formulas to get my answer for standard of error and the difference between both populations. once i got that i used the z score table.