#### **STAT 021 S22 HW 8**

#### Lizbeth Zarate-Hernandez

TOTAL POINTS

#### 10 / 10

**QUESTION 1** 

1 Description 3/3

√ + 3 pts Correct

QUESTION 2

2 Identify possible mistakes 3/3

√ + 3 pts Complete

+ 0 pts Incomplete

QUESTION 3

3 Connection to ASA guidelines 4/4

√ + 4 pts Correct

## Homework 8

Lizbeth Zarate-Hernandez 4/14/2022

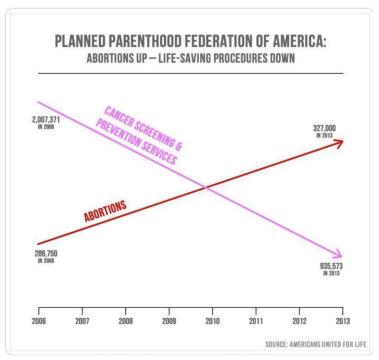
# Section 1: Description of the Statistical analysis and research question

The settings I usually see "bad" statistics analysis being used are on social media and in political debates. The motives for the most part is personal benefit for an individual or an organization to sway the crowd to their favor. These bad statistics can be presented to the public multiple ways in order to garner attention in favor of their point of view.

For this homework I found a graph that Rep.Jason Chaffetz presented to the congressional committee during a house hearing on planned parenthood. The graph is originally from an organization called Americans united for life, an anti-abortion organization. In an effort to include the original source, I found that the graph along with original blog post was taken down from the Americans for life website. The only proof I have that this graph was constructed by Americans for Life is the claim on the right corner of the graph.

The other source I found that referenced this analysis as "bad statistics" was in MSNBC and in the Washington Post. Both news outlets pointed out the data abuse made by the original source and calling out Rep.Jason Chaffetz for presenting an egregious graph and report in a high stake setting.

The graph in question was presented by Rep.Jason Chaffet to the congressional meeting to dicredit Planned Parenthood in order to cut their fundings (Roth 2015). The graph was create using the data produced by Planned Parenthood annual reports (Roth 2015). The interpretation of the graph's overall message is that Planned Parenthood number of abortions increased while breast cancer screenings & prevention service decreased over time (Phillips 2015).



Graph presented by Rep. Jason Chaffetz

# Section 2: Intentifying mistakes

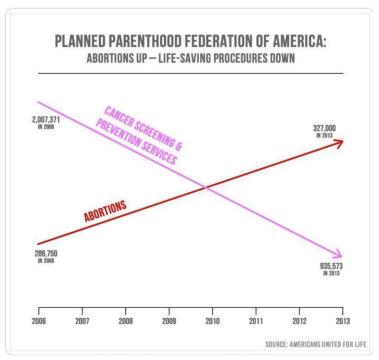
The graph presented is titled "Planned Parenthood Federation of America: Abortions up-Life-saving procedures down." The title does not specify what the two lines represent (i.e smoothing line(simple regression model)). They labeled the pink line with "Cancer Screening & Prevention Services" while the red line was labeled, "Abortions." At first glance it seems that Cancer Screening & Prevention Services drastically decreased While abortions increased drastically. But when we start looking at the numbers, like Roth (2015) invite us to do in his article, "they show that in 2006, Planned Parenthood performed 2,007,371 anti-cancer services and 289,750 abortions. By 2013, the gap had closed slightly, but the group still performed many more anti-cancer services than abortions, 935,573 to 327,000." The anti-cancer services number was greater than the abortions which is not presented correctly in the graph. They, the Americans for life organization were able to present it this way because of the absence of a y-axis label.

The data chosen to make this graph was appropriate since the data comes from the annual reports that planned parenthood published. As mentioned before, the most obvious mistake in this graph is an absence of a y-axis(Roth 2015). Without a y-axis, we are unsure of what is being counted in this graph against years. Without a labeled y-axis it is not fair to compare cancer screenings & prevention services and abortions taken place in planned parenthood facilities. Again we are also not aware of what these lines mean. It can be a linear regression model for each but it is unsure. Thus we are not aware of how this data was fitted and assessed.

The fact that they took down the graph along with its respective post indicates that the Americans for life knew that the way they went about presenting the data to skew people's view was on purpose. They had ulterior motives to not present the graph with a y-axis label and add colorful lines to draw the eyes to somewhere else besides the numbers and lack of y-axis.

1 Description 3/3

√ + 3 pts Correct



Graph presented by Rep. Jason Chaffetz

# Section 2: Intentifying mistakes

The graph presented is titled "Planned Parenthood Federation of America: Abortions up-Life-saving procedures down." The title does not specify what the two lines represent (i.e smoothing line(simple regression model)). They labeled the pink line with "Cancer Screening & Prevention Services" while the red line was labeled, "Abortions." At first glance it seems that Cancer Screening & Prevention Services drastically decreased While abortions increased drastically. But when we start looking at the numbers, like Roth (2015) invite us to do in his article, "they show that in 2006, Planned Parenthood performed 2,007,371 anti-cancer services and 289,750 abortions. By 2013, the gap had closed slightly, but the group still performed many more anti-cancer services than abortions, 935,573 to 327,000." The anti-cancer services number was greater than the abortions which is not presented correctly in the graph. They, the Americans for life organization were able to present it this way because of the absence of a y-axis label.

The data chosen to make this graph was appropriate since the data comes from the annual reports that planned parenthood published. As mentioned before, the most obvious mistake in this graph is an absence of a y-axis(Roth 2015). Without a y-axis, we are unsure of what is being counted in this graph against years. Without a labeled y-axis it is not fair to compare cancer screenings & prevention services and abortions taken place in planned parenthood facilities. Again we are also not aware of what these lines mean. It can be a linear regression model for each but it is unsure. Thus we are not aware of how this data was fitted and assessed.

The fact that they took down the graph along with its respective post indicates that the Americans for life knew that the way they went about presenting the data to skew people's view was on purpose. They had ulterior motives to not present the graph with a y-axis label and add colorful lines to draw the eyes to somewhere else besides the numbers and lack of y-axis.

#### 2 Identify possible mistakes 3/3

- √ + 3 pts Complete
  - + 0 pts Incomplete

## Section 3: ASA's guidelines for Ethical Statistical Practice

Ethical Statistical Practice that were violated in my opinion, are knowingly conducting statistical practices that exploit vulnerable populations who depend on planned parenthood's funding. Americans for life are an antiabortion organization whose motives is to defund planned parenthood in efforts to decrease access to abortion. People who use Planned Parenthood resources depend on the federal fundings.

From what I found on their website, Americans for life did not take responsibility when called out for their misuse of data analysis. Rep.Jason Chaffetz should have checked and consider his sources before using it in a critical conference that would affect others well being.

It is important to know that this graph, from what I know, has not been approved to be published. As a representative, Rep.Jason Chaffetz, should have presented a graph analysis of a peer reviewed analysis and from a nuetral source. Which leads to another violation. He should have communicated the data and graph sources as well the process which was used to fit and test this graph.

### References

Phillips, Amber. 2015. "5 Moments When Congress's Planned Parenthood Hearing Got Heated." *Washington Post*, September. https://www.washingtonpost.com/news/the-fix/wp/2015/09/29/the-5-most-contentious-exchanges-from-congresss-planned-parenthood-hearing/ (https://www.washingtonpost.com/news/the-fix/wp/2015/09/29/the-5-most-contentious-exchanges-from-congresss-planned-parenthood-hearing/). Roth, Zachary. 2015. "Congressman Uses Misleading Graph to Smear Planned Parenthood." *MSNBC.com*. https://www.msnbc.com/msnbc/congressman-chaffetz-misleading-graph-smear-planned-parenthood-msna692596 (https://www.msnbc.com/msnbc/congressman-chaffetz-misleading-graph-smear-planned-parenthood-msna692596).

3 Connection to ASA guidelines 4/4

√ + 4 pts Correct