Analysis of U.S. Cancer Morbidity Rates in Men & Women

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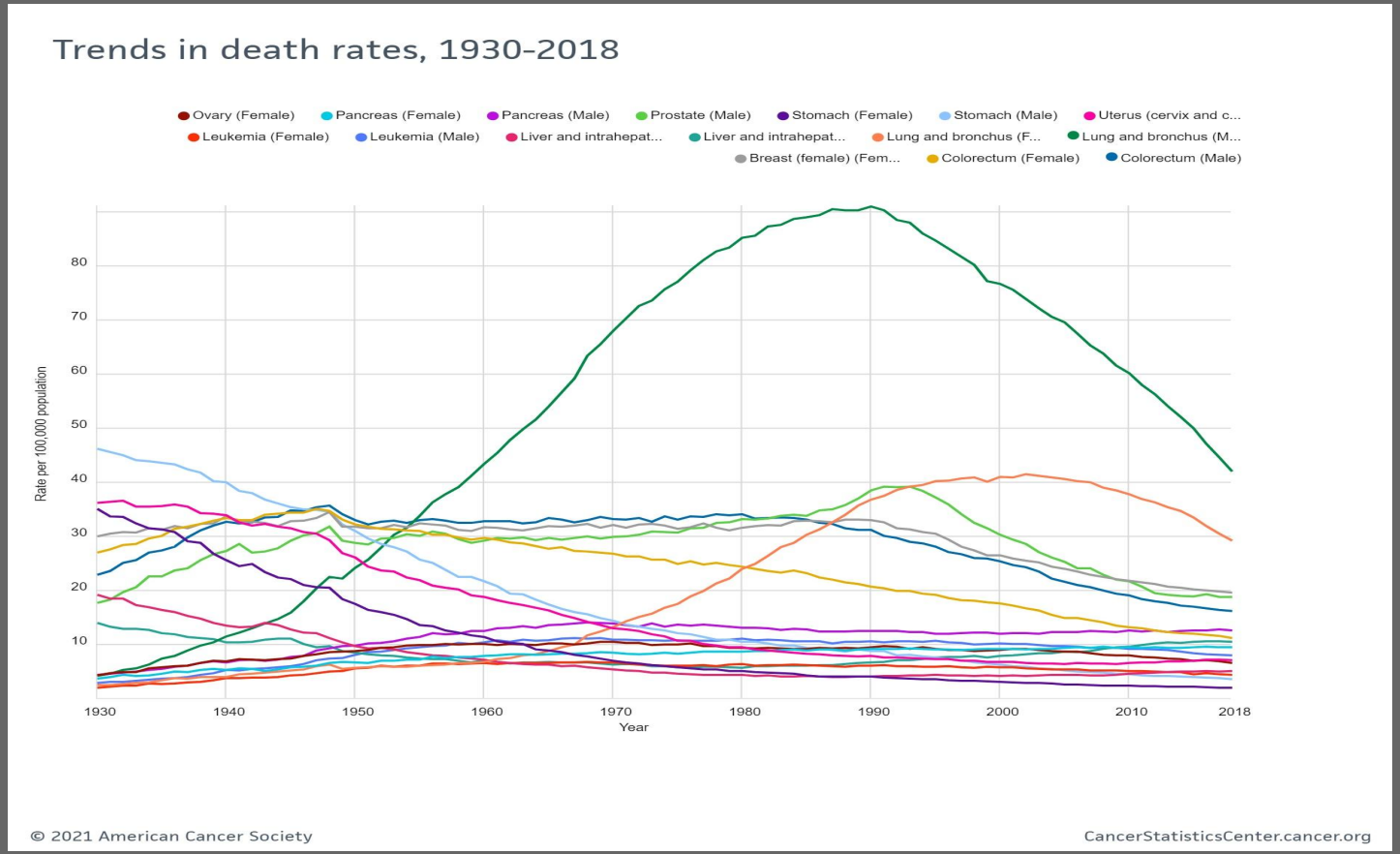
Overview

- The U.S. spends the most on healthcare, with the least return on investment
- While access to preventive care is improving, constant exposure to carcinogens is concerning to the average insurer
- With the expensive and increasing cost of coverage, historical disparities only worsen conditions for stakeholders (e.g. insurers and prospective insurers)

The Data

- The rates of cancer deaths, per 100,000, from 1930 - 2018, for each cancer type, for men & women in U.S. population
- Data includes 10 major types of cancer, along with prevalence
- Data can be found here: *https://raw.githubusercontent.com/mwarnsle1/Cap1-fem/main/DeathTrend-ALL.xlsx%20-%20All%20US.csv*

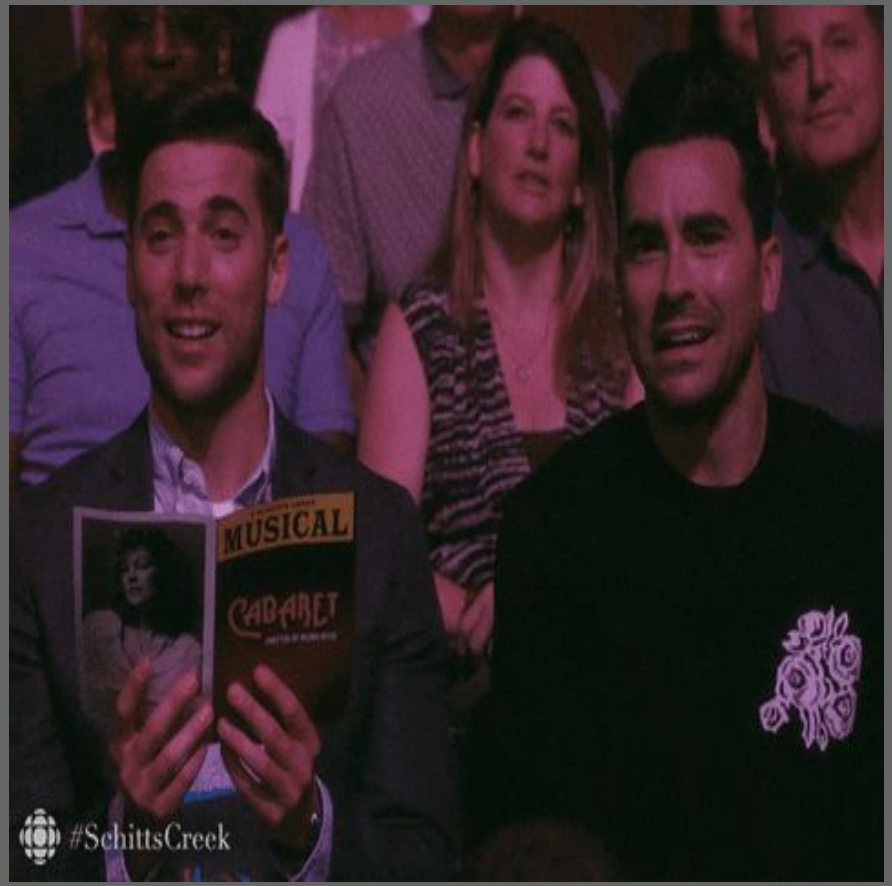
U.S. Cancer Death Trends



“Leaning In” for a Closer Look: What’s up with the women’s data?

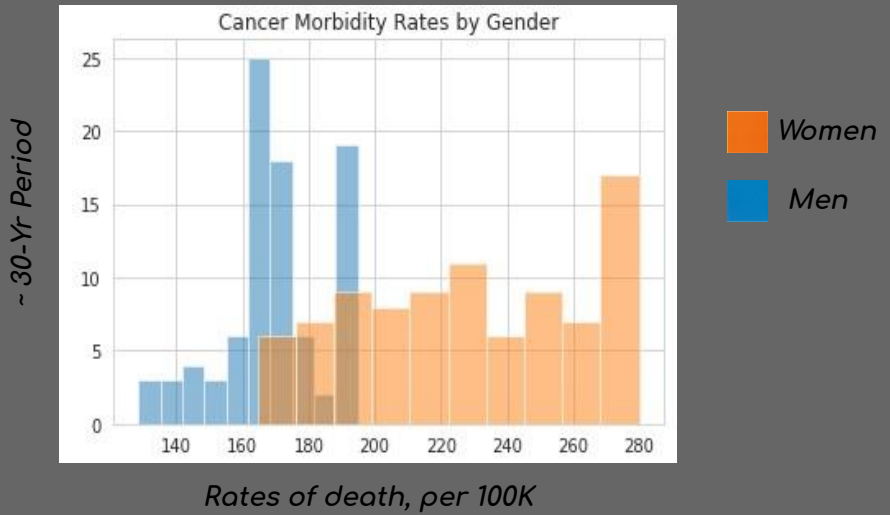
Discerning discrepancies in morbidity rates within a time range

U.S. Cancer Death Trends

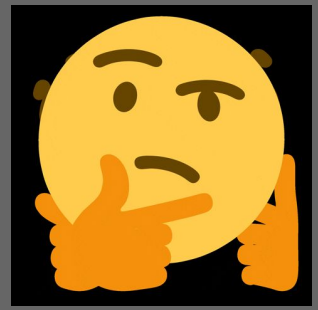


SURPRISE!

- Morbidity rates between genders showed statistically significantly differences...
- However, not in the direction of our alternative hypothesis; women had *lower* morbidity rates!



Recommendations:



Seek out a more inclusive dataset, that has breast cancer morbidity rates of men

Investigate which cancers have higher rates of morbidity within different time periods

From outcomes, examine possible higher rates between men & women, or other trends; causative effects for further analyses

The factors that distinguish us could aid in the treatment or prevention of the disease

Presentation *At-a-Glance*

Overview

Examining cancer morbidity rates for insurers & prospectives

Hypothesis Testing

Did women have higher rates of cancer morbidity than men, between 1980-2018?

Discussion

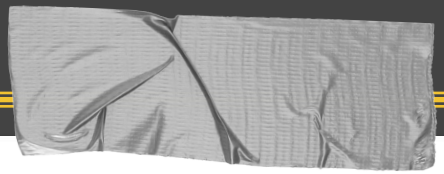
Further analyses can investigate which cancers have higher rates, any trends present (e.g. gender, age, racial), and examine causative factors.

Data Analyzed

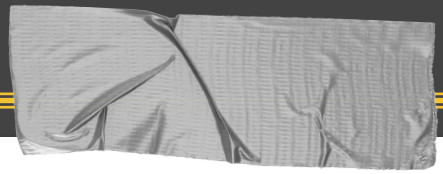
Analyzing a combined dataset of cancer morbidity rates in U.S. population, per 100K

Methods & Results

Comparative analyses showed statistical significance to reject the null. Follow-up tests and visualizations indicated men had higher rates of death



QUESTIONS OR COMMENTS?



THANK YOU!