## **DATA VISUALIZATION**

LUCAS SMITH SUMMER 2025

#### INTRODUCTION & MOTIVATION

- Background in healthcare
- Partner is a physician
- Interested to see overall trends
- Thought that this could be a challenging dataset to work with



#### INTRODUCTION TO DATA

- Received from TidyTuesday
- Contains research journal article high level data, from 2010-2023
- Only containing gynecological research journals
- 318 observations, of 65 features each
- Mainly around information such as
  - Journal name, title, year of publication
  - Races and ethnicities included in the research
- Required careful manipulation of race and ethnicity
  - Standardization
  - Aggregation



### MAIN QUESTIONS

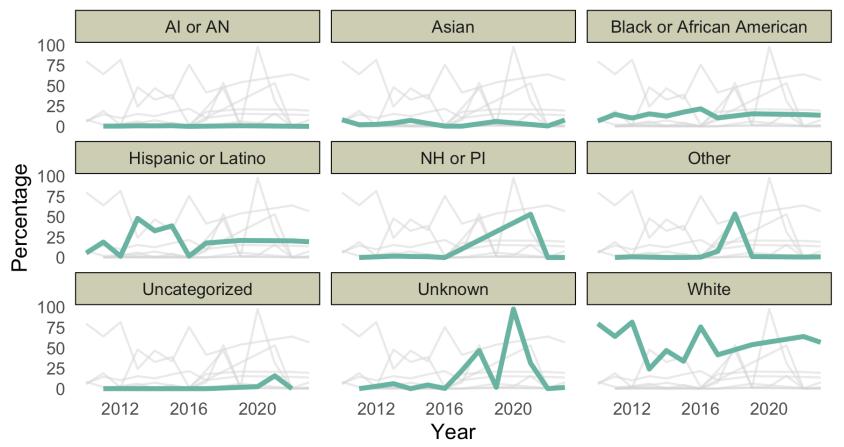
- I. How have ethnic and racial inclusion into research changed across time?
- 2. How is the length of a study noticeable between different journals?

The overarching concept is to understand how trends could be seen over time.



#### VISUALIZATION I

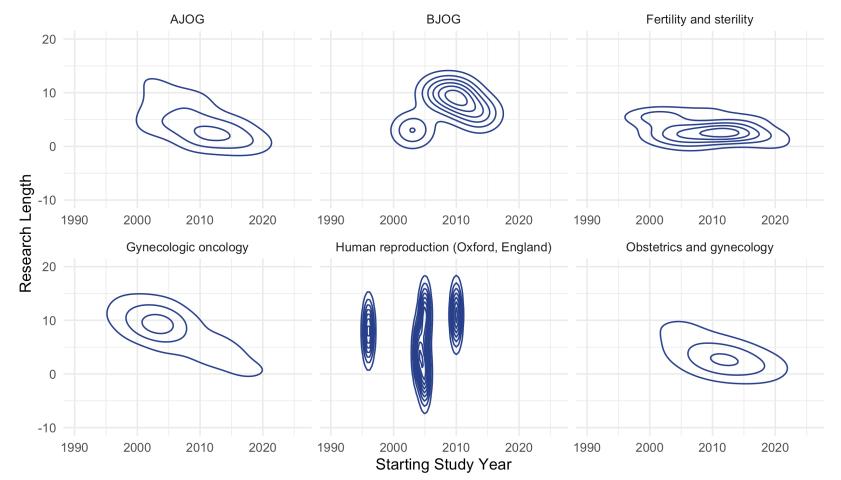
# Comparison of proportional race disparities in gynecological studies, 2010-2023





#### VISUALIZATION 2

#### Comparison of study lengths across gynecological journals





#### **CONCLUSION**

- Comparison of race/ethnicity across time
  - Not much change
  - 2020: highlight of 98% of values were listed as Unknown
- Comparison of study length
  - Journals seemed to have trends of lengths
    - Family and sterility being less than 5
    - BJOG around 10
  - Human reproduction started in incremental years:
    - **2000, 2005, 2010**
- Future
  - During write up, found longer study times viz 2 based on start years; would want more data
  - Similarly, for viz I would want more data for a longer period than just 20 years

