

Abstract

Novel coronavirus 2019 (COVID-19) additionally referred to as extreme acute breathing syndrome coronavirus 2 (SARS-CoV-2) is an enveloped, non-segmented positive-sense RNA virus belonging to the beta-coronaviridae family. This virus is thought to cause extreme bilateral pneumonia and acute breathing misery syndrome (ARDS) which could result in respiratory trouble requiring mechanical air flow and extensive care unit management. This study is conducted to outlook COVID-19 cases in the county of Kleberg, consisting of Riviera, Ricardo and Kingsville, Texas, and how it compares to COVID-19 cases reported by The New York Times. It also includes an in-depth look at cases distribution between male and female. Preliminary results indicated The New York Times would report more cases than Kleberg County would, and there were higher chances of the male population to contract the virus than the female population.

Background

- COVID-19 is a disease caused by a virus called SARS-CoV-2
 - Originated in Wuhan, China on December 2019
 - First case of COVID-19 in the U.S. was January 2021
- Types of COVID-19 Testing:
 - PCR and Rapid-Antigen
- Kleberg County
 - U.S. Census Bureau 2020 Population: 30,680
 - Consists of Kingsville, Ricardo and Riviera, Texas



Figure 1: Texas map shows Kleberg County location.

Questions

- How does Kleberg County reporting compare to New York Times reporting?
- What is the distribution between males and females of COVID-19 cases in Kleberg County?

Methods

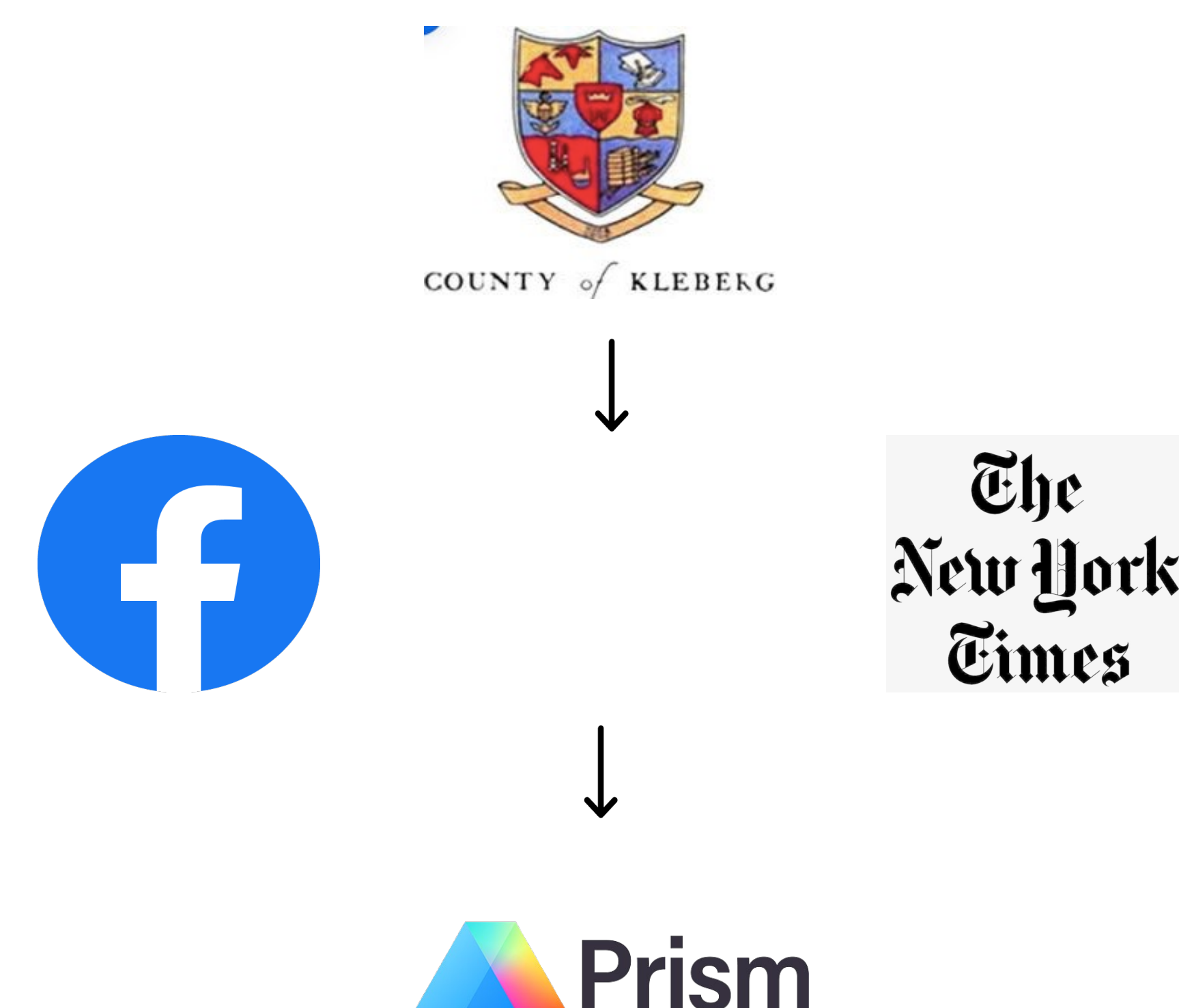


Figure 2: Methodology logos

Results

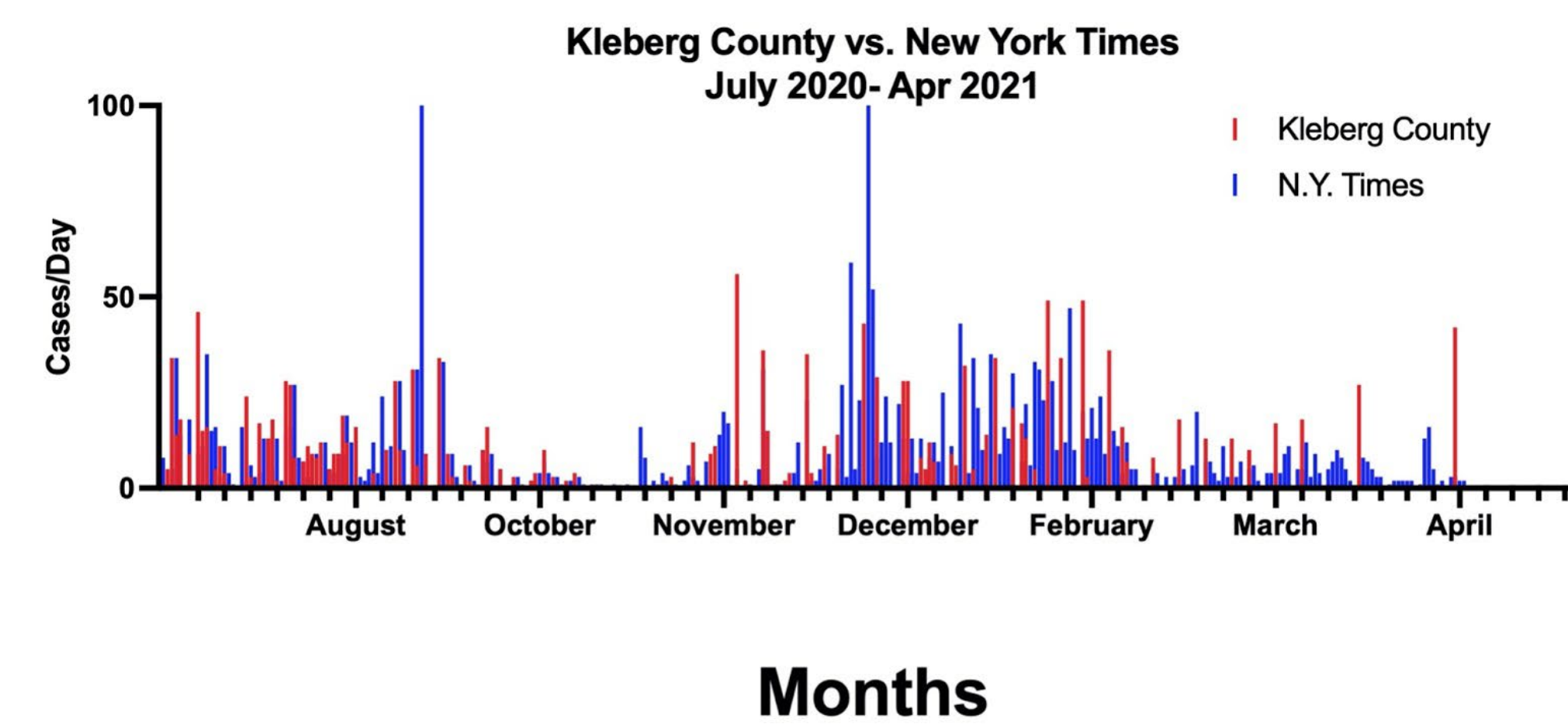


Figure 3: Total Case Count. A comparison of COVID-19 Cases in Kleberg County vs. The New York Times.

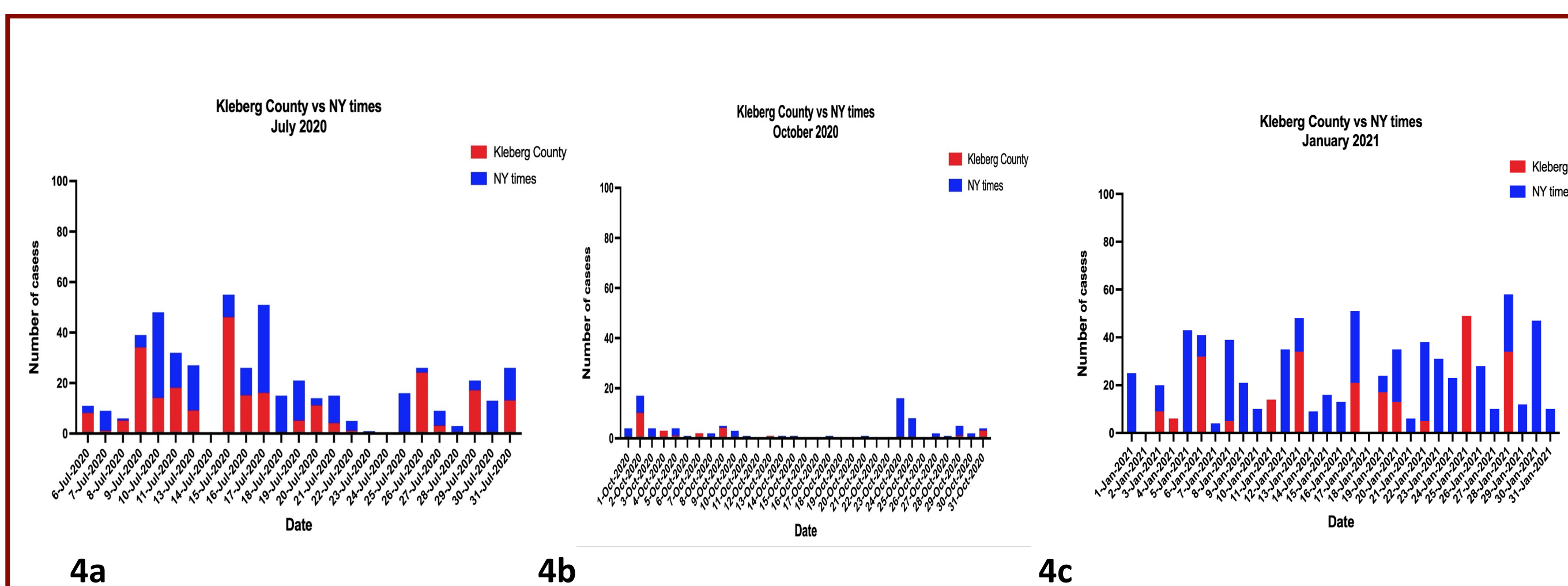


Figure 4: Individual monthly comparison. Data shows sample of month(s) of July 2020 (4a), October 2020 (4b) and January 2021 (4c). The individual monthly's cases display increasing peaks to decreasing peaks.

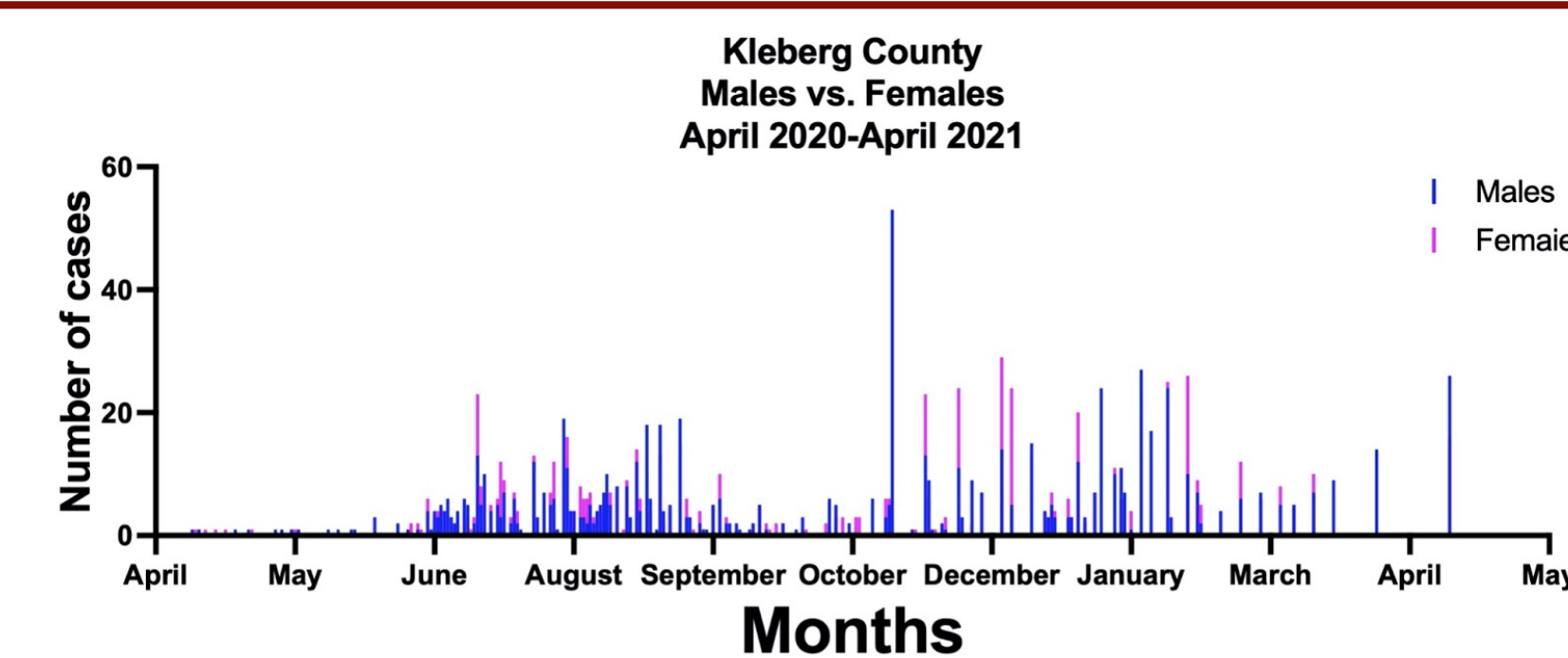


Figure 5: Males vs. Female. A comparison of COVID-19 Cases in Males vs. Females in Kleberg County.

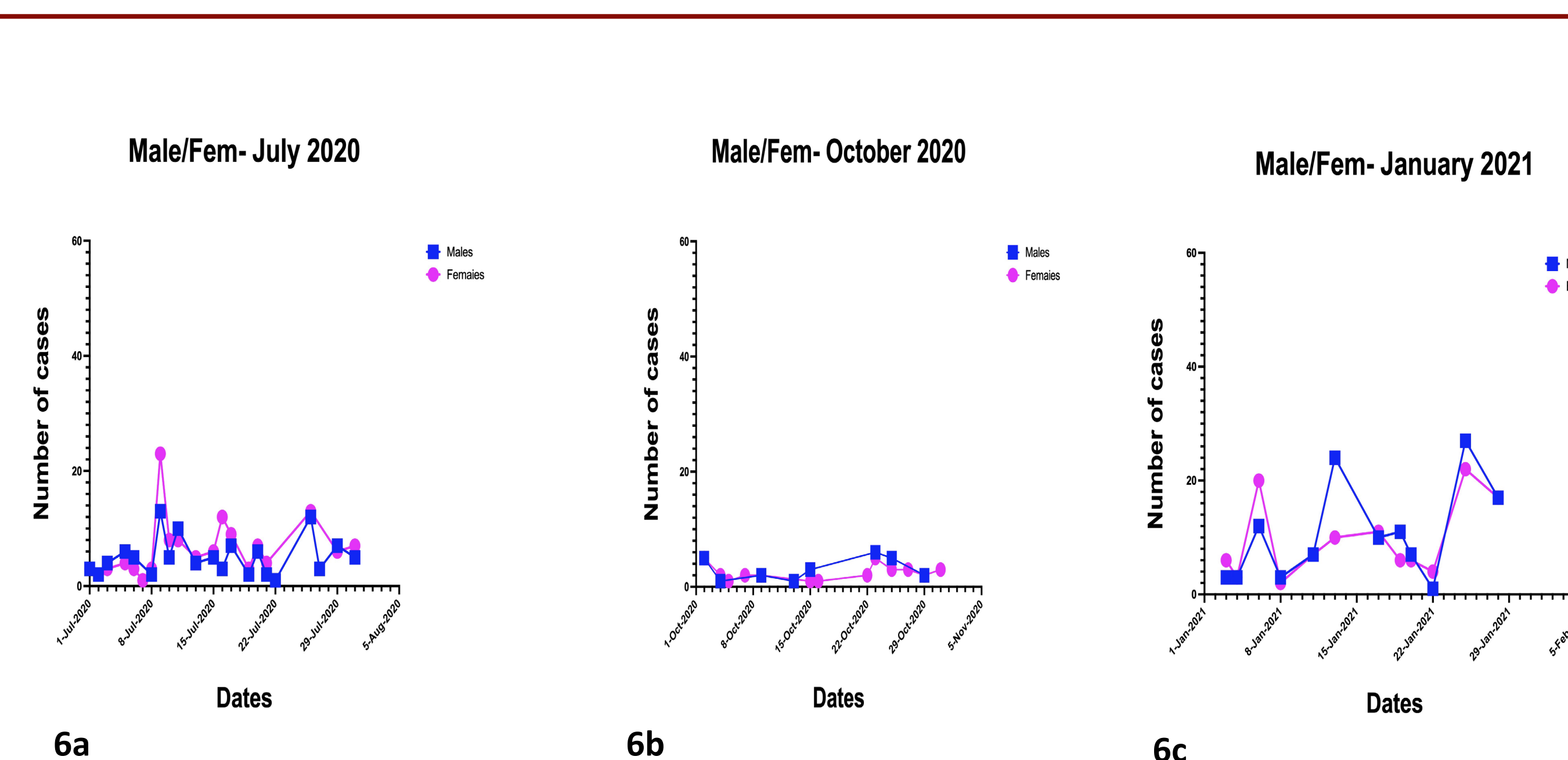


Figure 6: Individual Male vs. Female monthly comparison. Data shows sample of monthly cases of July 2020 (5a), October 2020 (5b) and January 2021 (5c).

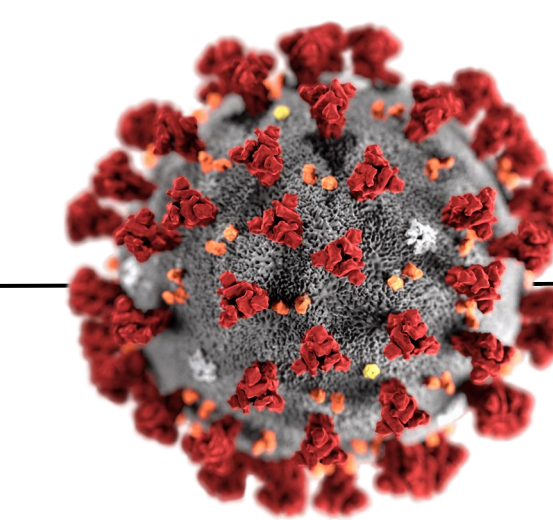
Conclusions

1,816

Case Count from July 2020 to April 2021 from Kleberg County

2,609

Case Count from July 2020 to April 2021 from The New York Times



808

Male Case Count from July 2020 to April 2021 from Kleberg County

772

Female Case Count from July 2020 to April 2021 from Kleberg County

References

- "Centers for Disease Control and Prevention. (2021). Basics of COVID-19.
- Centers for Disease Control and Prevention. (2021, February 22). *Symptoms of COVID-19*.
- Facebook. (n.d.). *Kleberg County COVID-19 Updates*. Kleberg County, Texas.
- Fauci, A. S., Lane, H. C., & Redfield, R. R. (2020). Covid-19—navigating the uncharted.
- Hui, D. S., Azhar, E. I., Madani, T. A., Ntoumi, F., Kock, R., Dar, O., ... & Petersen, E. (2020). The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health—The latest 2019 novel coronavirus outbreak in Wuhan, China. *International journal of infectious diseases*, 91, 264-266.
- What are the parts of a coronavirus? | Scripps Research. (2021).
- State & County QuickFacts. *United States Census Bureau*. Archived from the original on October 18, 2011.
- The New York Times. (2020, April 1). *Texas coronavirus map and case count*. The New York Times.

Acknowledgements

Thank you to my faculty mentor, Dr. Maria Velez-Hernandez, and the McNair Scholars Program for allowing me the opportunity to conduct this research.

Contact Information:
laura.lopez@students.tamuk.edu