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INEQUITIES IN EPILEPSY: A SCOPING REVIEW



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Background

Approximately 50 million people have been diagnosed with epilepsy worldwide and 150,000 new cases are reported in the United States annually.^{1,2} It is imperative that the health inequities tied to epilepsy are assessed and accounted for. Further, it is vital that healthcare providers are familiar with such inequities to supplement appropriate care for patients.

Objective

To complete a scoping review of literature surrounding health inequities in epilepsy while providing recommendations for future research.

Methods

During July of 2022, we searched MEDLINE and Ovid Embase to find published articles pertaining to epilepsy and health inequities. Initially, authors received training. Authors then screened and data extracted in a masked, duplicate manner. Studies published within the timeframe of 2011-2021 in all countries were deemed appropriate. We screened 5,325 studies for titles and abstracts, then 56 studies for full text. We evaluated the inequities of race/ethnicity, sex or gender, income, occupation status, education level, under-resourced/rural, and LGBTQ+. To summarize the data and descriptive statistics of our study, we used Stata 17.0 (StataCorp, LLC, College Station, TX).

Results

We obtained a sample size of 45 studies for study inclusion. The most reported health inequities were income (18/45, 40.0%), under-resourced/rural (15/45, 33.3%), race/ethnicity (15/45, 33.3%). The least reported health inequity was LGBTQ+ (0/45, 0.0%).

Figure 1. PRISMA Flow Diagram

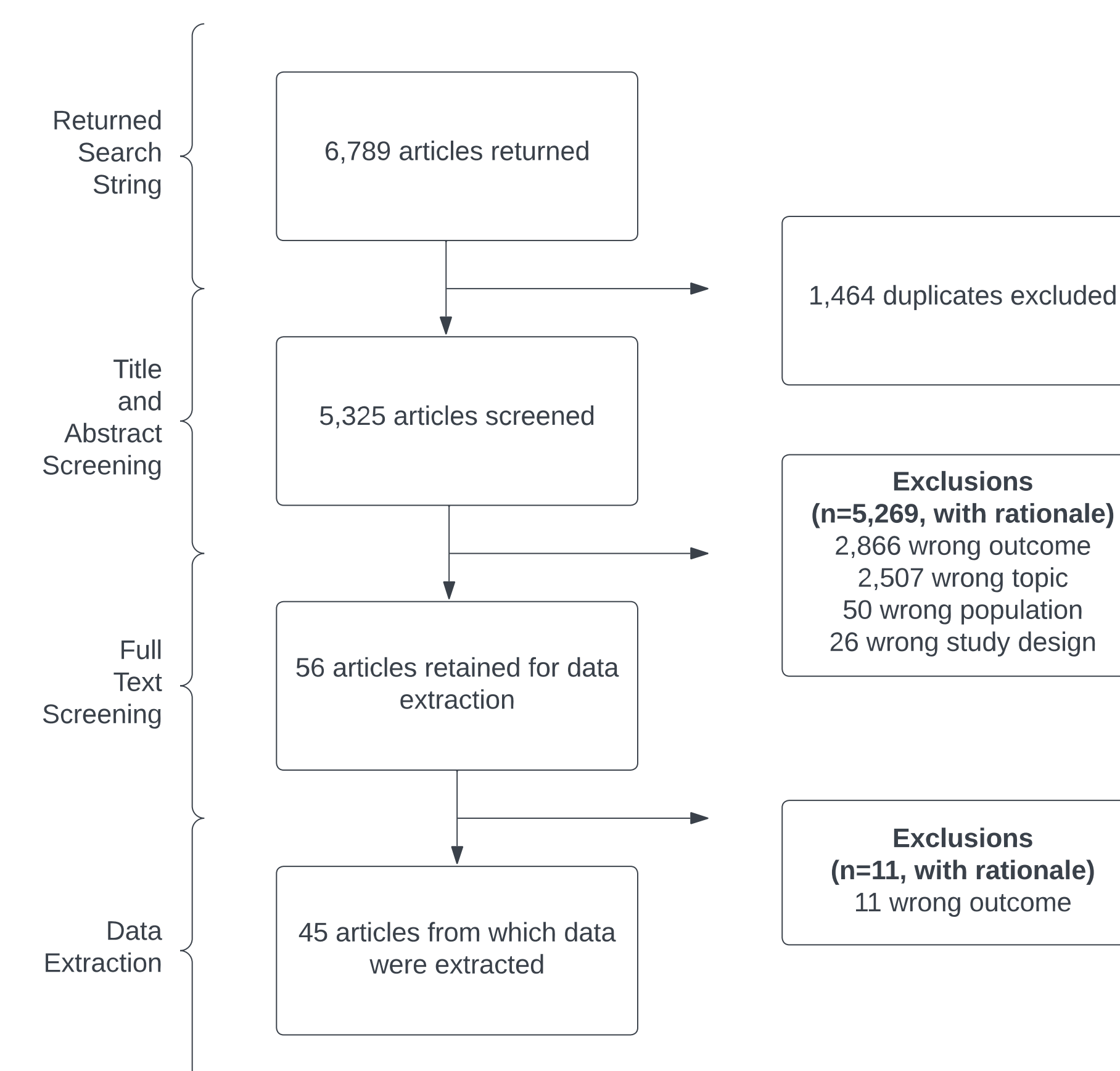


Figure 2. Frequency of Inequities Examined

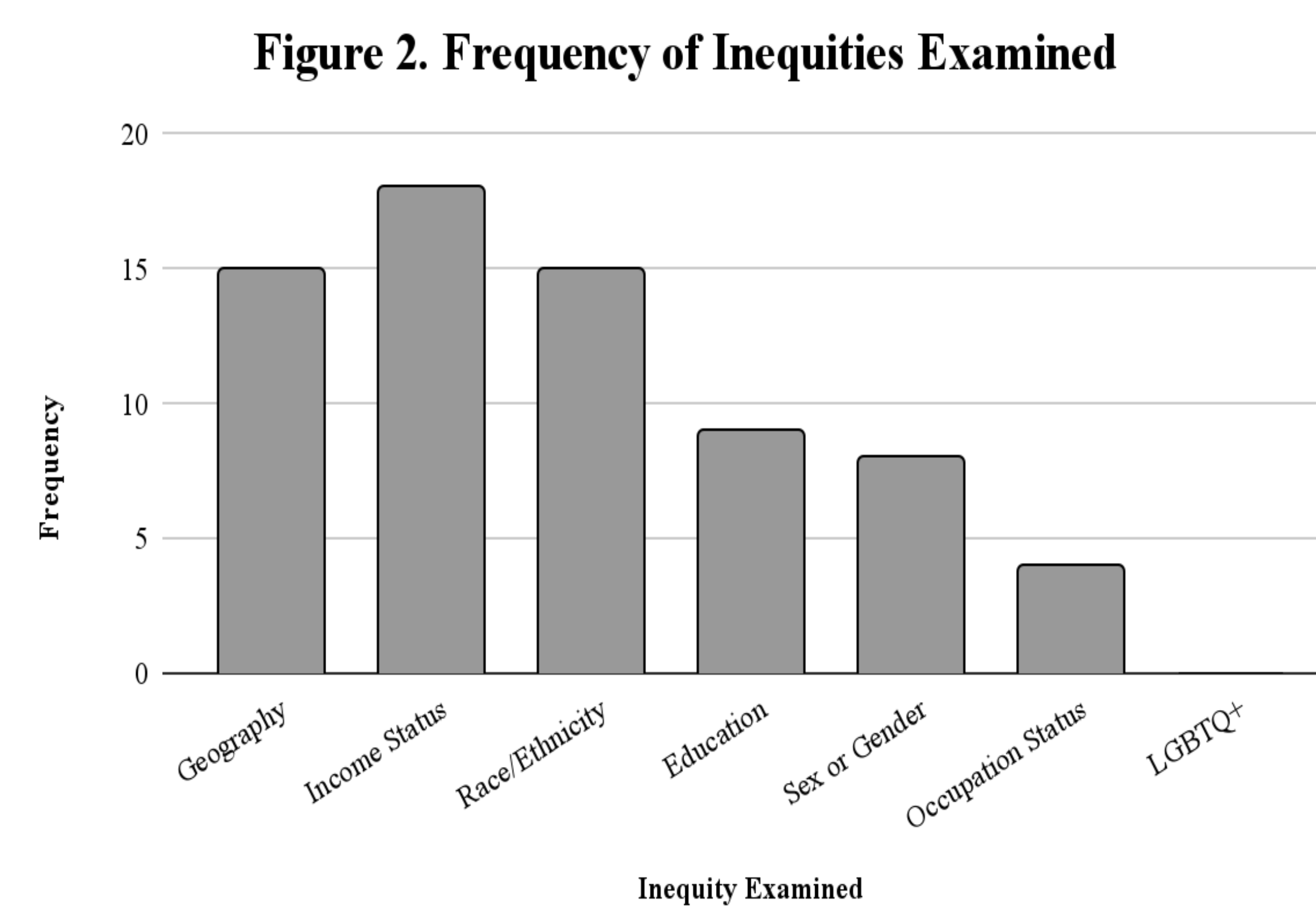


Figure 3. Frequency of Factors Examined by Year

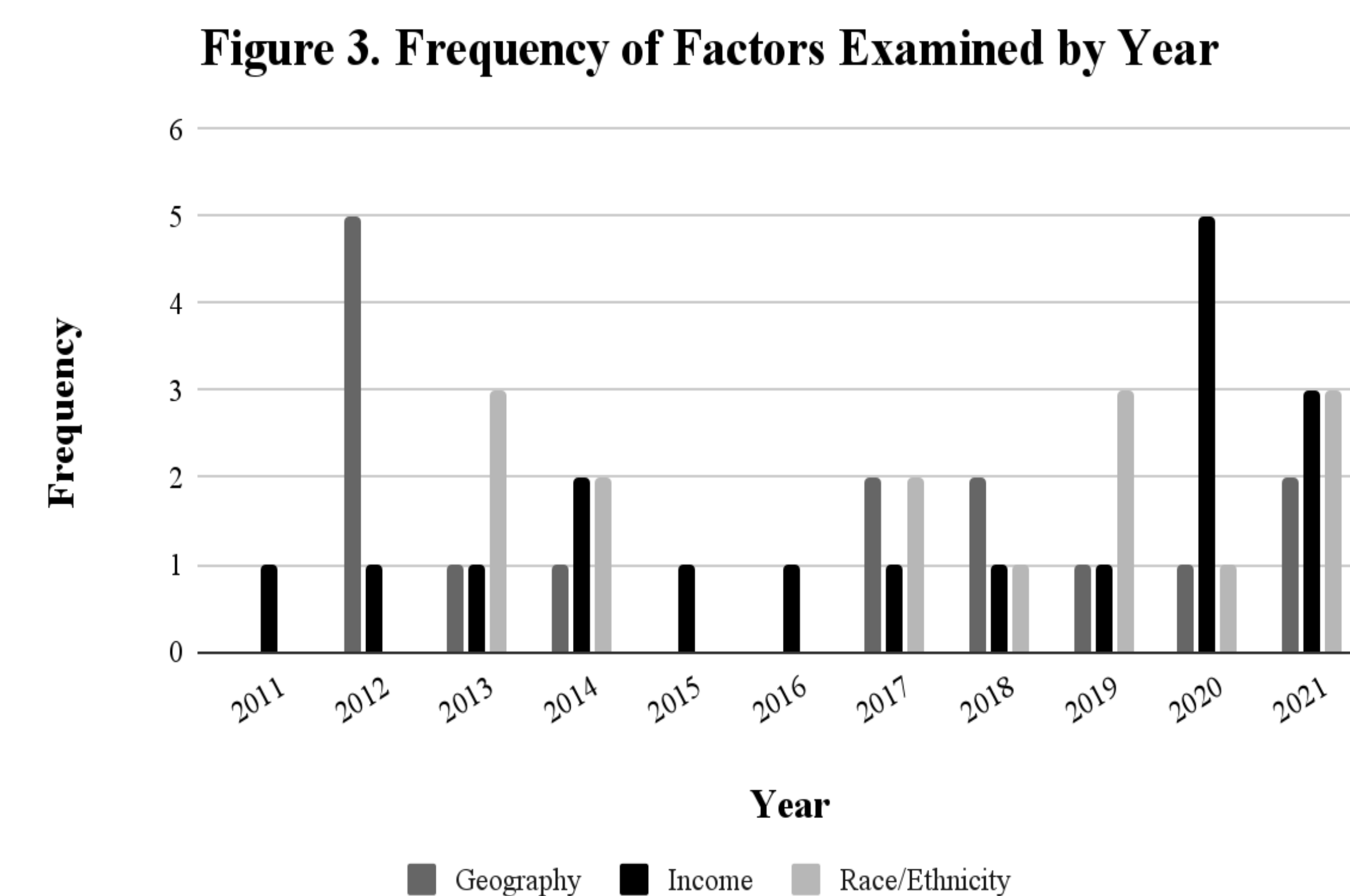


Table 1. Descriptive Statistics

Disparity Examined	Frequency (n = 45)	Percentage (%)
Geography	15	33.33
Income Status	18	40.00
Race/Ethnicity	15	33.33
Education	9	20.00
Sex or Gender	8	17.78
Occupation Status	4	8.89
LGBTQ+	0	0.00
Study Design		
Clinical Trial	1	2.17
Cohort Study	4	8.70
Cross-Sectional Analysis	18	39.13
Literature Review	6	13.04
Database Review	14	30.43
Systematic Review/Meta-Analysis	3	6.52
Study Setting		
Single Institution	21	45.65
Multiple Institution	9	19.57
National Database	11	23.91
Regional Database	1	2.17
Other	4	8.70

Conclusion

The findings of our study suggest that gaps exist in literature concerning epilepsy and inequities. The inequities of income status, under-resourced/rural, and race/ethnicity were examined the most while LGBTQ+, occupation status, and sex or gender were examined the least. With the ultimate goal of more equitable and patient-centered care in mind, it is vital that future studies endeavor to fill in these determined gaps.

References

1. Epilepsy. Cleveland Clinic. Accessed June 27, 2022. <https://my.clevelandclinic.org/health/diseases/17636-epilepsy>
2. Epilepsy. Accessed July 8, 2022. <https://www.who.int/news-room/fact-sheets/detail/epilepsy>

Acknowledgements

We are grateful to the OSU medical library for their procurement of relevant literature and Reece M. Anderson, M.P.H. who provided invaluable assistance in our statistical analyses and data management systems.

