Relationship between Catatonia Treatment and Diagnosis Code, Gender, and Location

Victoria Cegielski, Tej Kosuri, Bethel Orshiso, Aarya Ramprasad, Alex Schray
Tyler Allison MD, Jeremy Provance MS, Suman Sahil
University of Missouri-Kansas City School of Medicine

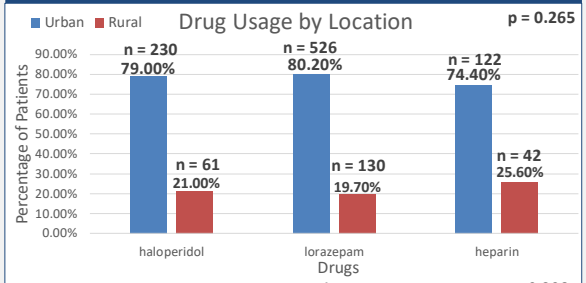
Background

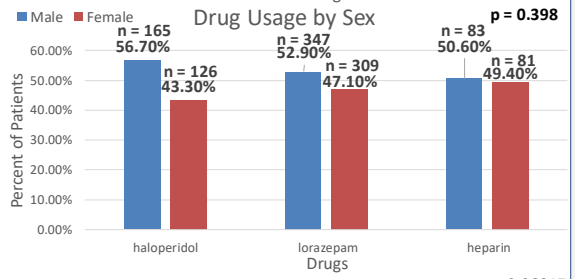
- Catatonia is a complex psychomotor disorder that presents with motor signs, impulse disturbances, and autonomic instability[1]
- Exact molecular physiology of catatonia is unknown
- Hypothesized that decreased activity of inhibitory neurotransmitter GABA is mechanism of pathology since benzodiazepines manage symptoms well
- Most frequently used benzodiazepine is lorazepam[2]
- Haloperidol in catatonia used for psychotic symptoms[3]
- Heparin in catatonia used to prevent DVT[4]
- Treatment protocol for catatonia is still not possible based on lack of research in this field[5]
- Objective was to compare three common catatonic drugs of different classes, lorazepam, haloperidol, and heparin, with diagnosis code, gender, and location

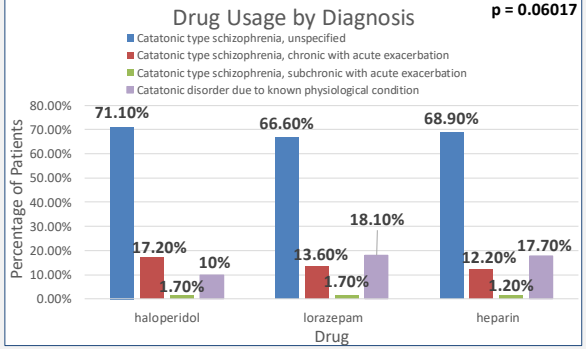
Methods

The data set used for this study was gathered from the Cerner database and consisted of information from individuals between the ages of 5 and 90 who have been diagnosed with Catatonia. Data from individuals that were not prescribed lorazepam, haloperidol, or heparin was deleted using Excel, as were repeat individuals, resulting in 1,111 data points. Statistical analysis was performed using Chi-square comparisons for categorical data via the statistical analysis software R (version 4.0.2). All statistical tests were two-tailed, and a p-value < 0.05 was considered statistically significant.

Results







Conclusion

- There is no statistical significance between catatonic drugs (lorazepam, heparin, and haloperidol) prescribed to patients from different locations, genders, or diagnoses because the P-values of all tests were greater than 0.05.
- These findings seem to indicate that there is no physician bias while prescribing catatonic drugs for different symptoms of patients in this study.
- Future studies should compare these drugs to other variables (ethnicity, payer status, etc.) to determine if the lack of physician bias is restricted to specific variables or present universally.
- In the future, a higher sample size could be used while analyzing diagnosis code to see if the results are statistically significant since the current P-value is close to 0.05.

References

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