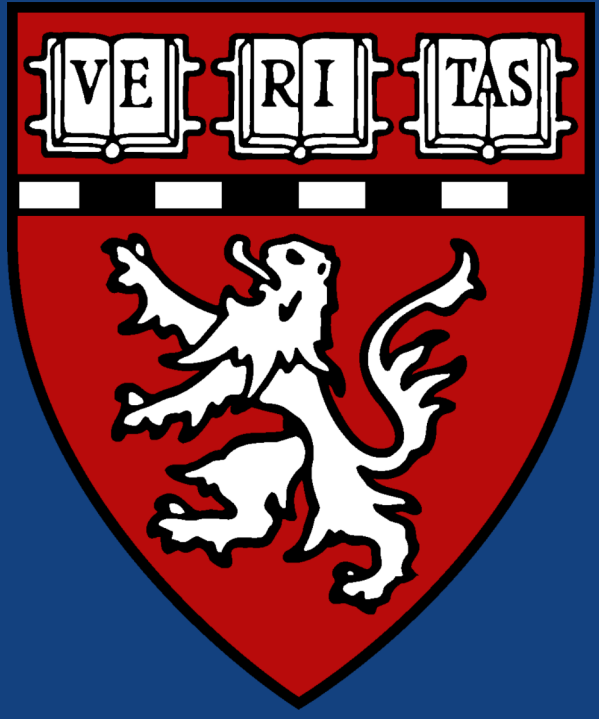




Impact of Constipation on Resource Utilization in Patients with Parkinson's Disease: A Nationwide Analysis



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BACKGROUND AND AIM

- Parkinson's disease (PD) is a grave neurodegenerative disorder.
- Constipation is a major disabling non-motor symptom in PD patients affecting Quality of Life.
- AIM: To evaluate the prevalence of constipation and its impact on resource utilization in hospitalized patients with PD in the US.

METHODS

- Study Design: Retrospective Cohort Study
- Database: National Inpatient Sample (NIS) 2019
- Population: Inpatient admissions with a primary discharge diagnosis of PD with and without a secondary diagnosis of Constipation.
- Outcome: Resource utilization
- Multivariate linear regression analysis followed by predictive margins was used to obtain adjusted estimates of the length of stay and total hospital charges.

RESULTS

- Total Population: 21,125
- In adjusted analysis, constipation was associated with a significantly longer length of hospital stay in patients with PD compared to without it (8.56 days vs. 5.89 days, p value <0.01).
- There was no statistically significant difference in hospital charges between the two groups.
- A higher percentage of PD patients with constipation were discharged to skilled nursing facilities compared to non-constipated (51.2% vs. 43.1%).

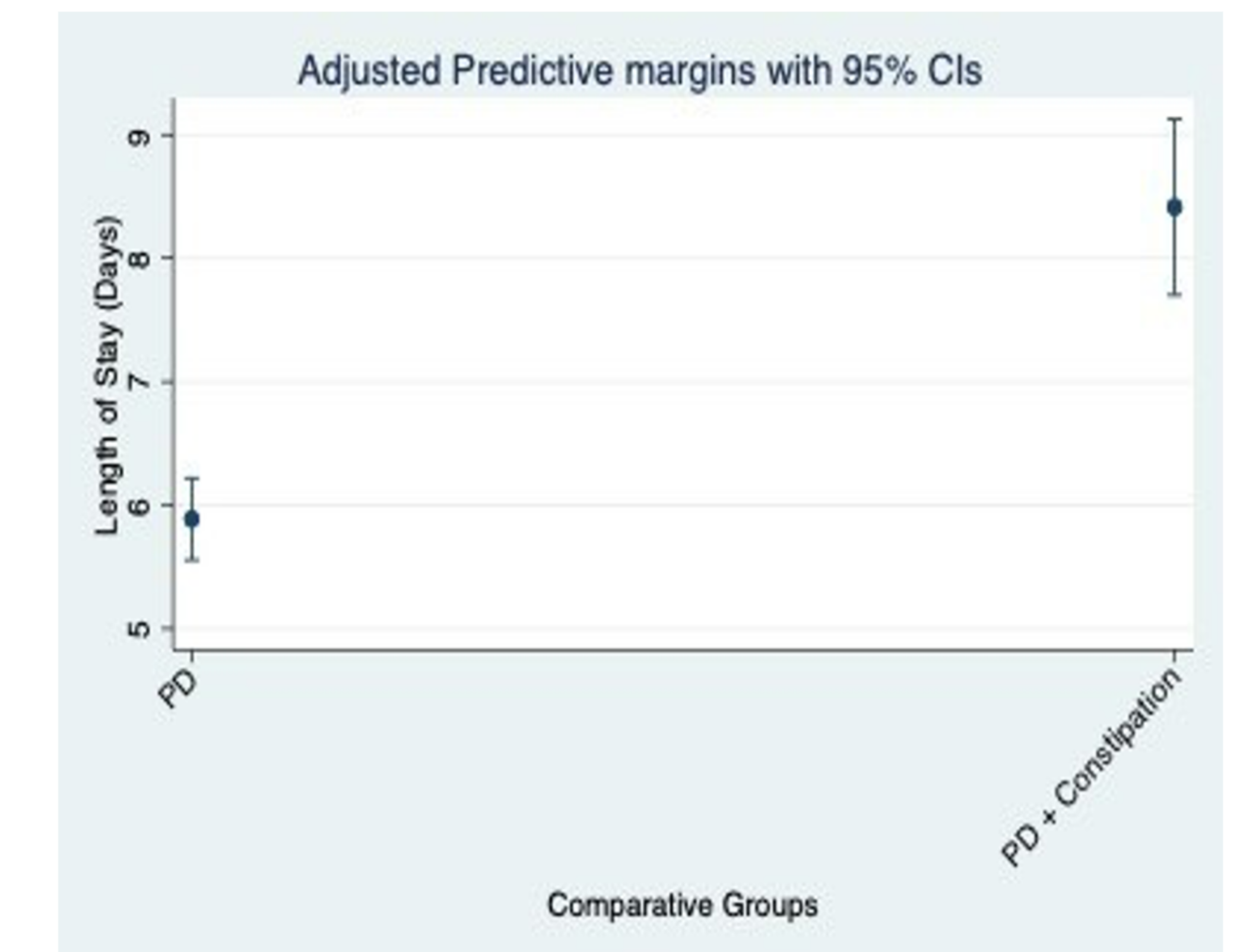
RESULTS (Cont.)

| Variables | Parkinson's without Constipation (18265) | Parkinson's with Constipation (2860) | p-value |
|---|--|--------------------------------------|---------|
| a) Baseline Patient and Hospital Characteristics | | | |
| Age (SD) | 74.0 (9.8) | 75.1 (8.7) | 0.01 |
| Female (%) | 6175 (33.8) | 950 (33.2) | 0.78 |
| Race (%) | | | 0.38 |
| White | 14210 (79.7) | 2145 (77.2) | |
| Charlson Comorbidity Index (SD) | 1.6 (1.7) | 1.8 (1.7) | 0.02 |
| Hospital Type (%) | | | |
| Urban | 16810 (92.0) | 2660 (93.0) | 0.41 |
| Teaching | 13985 (76.6) | 2305 (80.6) | 0.05 |
| Hospital Bed Size (Large) | 9935 (54.4) | 1520 (53.2) | 0.34 |
| Payer Information (%) | | | |
| Medicare | 15020 (84.1) | 2545 (90.1) | < 0.01 |
| Private Insurance | 2275 (12.7) | 180 (6.4) | |
| Disposition (%) | | | |
| Home | 5970 (32.7) | 535 (18.7) | |
| SNF | 7860 (43.1) | 1465 (51.2) | |
| Died | 200 (1.1) | 10 (0.4) | |
| Malnutrition | 1660 (9.1) | 365 (12.8) | 0.01 |

| | b) Resource Utilization | | |
|----------------------------|--------------------------------|----------------------------|--------|
| LOS (Unadjusted) | 5.83 (95% CI 5.47-6.18) | 8.56 (95% CI 7.84-9.28) | < 0.01 |
| LOS (Adjusted) | 5.89 (95% CI 5.56-6.22) | 8.41 (95% CI 7.70-9.13) | < 0.01 |
| TOTAL CHARGES (Unadjusted) | 59555 (95% CI 56066-63043) | 56882 (95% CI 52109-61656) | 0.31 |
| TOTAL CHARGES (Adjusted) | 59419 (95% CI 56292-62547) | 57770 (95% CI 52983-62557) | 0.51 |

Adjusted for Age, Charlson Comorbidity Index, Hospital (Location, Teaching status), Insurance status, Malnutrition.
SD: Standard Deviation ; SNF: Skilled Nursing Facility; LOS: Length of Stay

RESULTS (Cont.)



PD: Parkinson's Disease; PD+ constipation: Parkinson's Disease with Constipation

CONCLUSION

- Our study showed a high prevalence of constipation (13.5%) among hospitalized patients with PD.
- The presence of constipation leads to an increased length of stay. In addition, these patients are more likely to be discharged to skilled nursing facilities, which can increase overall healthcare costs.
- To mitigate adverse outcomes, improve quality of life and decrease economic burden, a careful assessment and prompt intervention is required to address constipation in this patient population.

PRESENTER'S BIO AND REFERENCES

