BACKGROUND

• Cumulative anticholinergic burden refers to the cumulative effect of multiple medications with anticholinergic properties.

• Also, concomitant use of cholinesterase inhibitors (ChEIs) and anticholinergic burden can nullify the benefit of ChEIs and worsen Alzheimer’s disease (AD).

• Till date no study has accounted for patient-specific dosing and duration while accounting for the cumulative burden of anticholinergic medications in AD.

OBJECTIVE

Examine the prevalence and predictors of cumulative anticholinergic burden among older adults with AD initiating with ChEIs.

STUDY DESIGN & METHODS

Patient population: 65 years of age or older patients with AD at index date, and are continuously enrolled in a Medicare fee-for-service plan from January 2013 – December 2017.

STUDY DESIGN: Retrospective cohort

Study Outcome Measures

• Patient specific cumulative anticholinergic (ACH) burden measured over one year time period

• Burden based on total standardized daily dose (TSDD) categorized as No (TSDD=0), Low (1-89), Medium (90-499) and High (>500)

Statistical analysis: Two multivariable logistic regression models adjusted for the factors identified using the conceptual framework of the Andersen Behavioral Model.

1. Logistic regression: Predictors of ACH burden levels dichotomized into moderate/high versus low/no burden

2. Multinomial logistic regression: Predictors of moderate and high versus low/no burden

DISCUSSION & CONCLUSIONS

Overall, this study found nearly one in four have high anticholinergic burden over one-year follow-up.

• Several predisposing, enabling, and need factors contribute to moderate and high anticholinergic burden.

• Key decision-makers should be well cautious of prescribing any medication with anticholinergic properties and always opt for alternatives to these medications.

REFERENCES
