

Submission Id: 3788

Title

Is Cognitive Impairment Associated with Inadequate Bowel Preparation for Colonoscopy?

Priority 1 (Research Category)

Screening, prevention, and health promotion

Presenters

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Abstract

Context: With colonoscopy being regarded as the gold standard and the most common method for colorectal screening, it is important for patients to have an adequate bowel preparation. Inadequate bowel preparation (IBP) can affect up to 25% of screening colonoscopies depending on the program. IBP is associated with missed neoplasia/diagnosis, prolonged procedure times, lower cecum intubation rates, and need for repeat procedures, and thus this is a key aspect of colonoscopy quality.

Objectives: to determine: 1) if abnormal clock drawing (as a proxy for cognitive impairment) was associated with IBP and 2) the association of participant characteristics with IBP.

Study Design and Analysis: Cross-sectional study analyzed with multivariable generalized linear mixed models.

Setting/Dataset: Three academic centers in Iowa, North Carolina, and Texas.

Population Studied: 50-85 year-olds scheduled for a screening or surveillance colonoscopy.

Instruments: Colonoscopy/pathology review form and Mendes-Santos et al. (2015) clock scoring method.

Outcome Measures: Bowel preparation was dichotomized as adequate (excellent, good, or adequate) or inadequate (fair, poor, or inadequate).

Results: A total of 2011 participants completed the clock drawing test and colonoscopy. Mean age was 62.8 years; 1269 (63%) were female, 1683 (84%) White, and 381 (19%) Hispanic. One hundred and nineteen (6%) had IBP and 421 (21%) had abnormal clock drawing scored using Mendes-Santos, et al. In the multivariable model, the odds ratio of having an IBP vs. adequate was 2.73 (95% CI, 1.75-4.28) for household family income of less than \$40,000 compared to income greater than \$80,000, and was 1.52 (95% CI, 0.99-2.35) for abnormal clock drawing compared to normal clock drawing, after controlling for age.

Conclusions: Lower household income was associated with inadequate bowel preparation, a finding similar to other studies. Participants with abnormal clock drawing were not significantly more likely to have inadequate bowel preparation.

Funding: NIH Grant R01CA215034