

The Polypharma Study: Association Between Diet and Amount of Prescription Drugs Among Seniors

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Abstract:

Background: Polypharmacy, commonly described as the use of five or more prescribed medications, is a prevalent health issue among seniors because of the potential adverse side effects due to medication interactions.

Aims: To investigate the association between dietary patterns and number of medications used. We hypothesized that a plant-based diet and healthy lifestyle choices decreases morbidities and number of medications taken.

Methods: This is a cross-sectional study. Data on 328 participants, aged 60 years or older, were collected through questionnaires and measurements at the Loma Linda University Drayson Center in Loma Linda, CA, between 2015 and 2016. The dependent variable was the number of pills taken, used as counts, and the main exposure was the type of diet adopted. Negative binomial regression was used for analysis.

Results: Results suggest that a vegan diet reduces the number of pills by 58% compared to non-vegetarian (IRR=.42 [95% CI: .25-.70]), even after adjusting for covariates. Increases in age, body mass index (BMI), and presence of disease suggest an increased number of pills taken.

Conclusion: A vegan diet showed the lowest amount of pills in this sample. Body mass index also had a significant positive association with the number of pills.

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