Submission Id: 3570

Title

Association of care fragmentation with polypharmacy and inappropriate medication among older adults with multimorbidity.

Priority 1 (Research Category)

Multimorbidity

Presenters

Takayuki Ando, MD, MPH, yukiko abe, BA, Yasumichi Arai, MD, PhD, Takashi Sasaki, Seitaro Fujishima

Abstract

Context: Fragmentation of care is associated with worse prognosis and higher health care costs in several conditions such as malignancy. Caring for older adults with multimorbidity often requires the involvement of multiple specialists, but the impact of fragmentation of care in older adults with multimorbidity remains unclear. In Japan, the healthcare insurance system guarantees free access, allowing patients to freely see specialists, which can easily lead to fragmentation of care.

Objective: To determine how the fragmentation of care is associated with polypharmacy, potentially inappropriate prescribing, and health care costs in older adults.

Study Design: An observational cross-sectional study using the baseline survey and claims data of the Cohort study. (The Kawasaki Aging and Wellbeing Project)

Setting or Dataset: Community-dwelling people.

Population studied: Independent elderly aged 85-89 living in Kawasaki city, Japan.

Outcome Measures: The primary outcome was the number of regularly prescribed drugs extracted from claims data. The number of potentially inappropriate drugs for the elderly and the outpatient medical care cost were used as secondary outcomes.

Results: There were a total of 1026 study participants, with a 1:1 sex ratio; the mean age was 86.6 years. 650(63.4%) participants regularly visited two or more outpatient clinics. The average number of prescribed drugs was 5.3, and the more clinics a patient visited, the more drugs were prescribed. The odds ratio for polypharmacy, defined as six or more regular prescribed medications, tended to be significantly higher with more visiting clinics, even after adjusted with the number of comorbid chronic illnesses. The number of potentially inappropriate drug prescriptions for the elderly increased with the number of clinics visited. When adjusted for the number of chronic conditions, there was no significant correlation between the fragmentation of care and the number of potentially inappropriate

prescriptions. Annual outpatient medical and drug costs were also higher for patients with the fragmentation of care, even when stratified by the number of concomitant chronic conditions.

Conclusion: Older adults with the fragmentation of care who regularly visited multiple outpatient clinics correlated with a higher number of prescribed drugs and higher medical costs, even with the same number of chronic conditions.