REVISIÓN BIBLIOGRÁFICA SEPTIEMBRE 2019: Selección de artículos

REVISTAS GERIÁTRICAS

JOURNAL OF GERIATRIC ONCOLOGY

Potentially inappropriate medication use and associated healthcare utilization and costs among older adults with colorectal, breast, and prostate cancers

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Abstract

Objectives

To assess the association between Potentially Inappropriate Medication (PIM) use and healthcare utilization and costs among Medicare beneficiaries with breast, prostate, or colorectal cancer.

Materials and Methods

A retrospective cohort study was conducted using the SEER-Medicare linked database in older adults with breast (N = 17,630), prostate (N = 18,721), or colorectal cancer (female: N = 5652; male: N = 3768). PIM use was defined based on 2015 Beers Criteria and was measured using prescription claims. Count models were used to examine the association between PIM use and the number of inpatient and ER visits. Generalized linear models were utilized with the log-link function and gamma distribution to analyze associations between PIM use and medical expenditures. The Inverse Treatment Probability Treatment Weights were applied in the analyses.

Results

61.7% of patients with breast cancer, 47.3% of patients with prostate cancer, and 66.3% (females: 68.0%; males: 63.8%) of patients with colorectal cancer were found to use one or more PIM. PIM use was positively associated with number of inpatient visits, number of ER visits, non-drug costs, and total medical costs in all three types of cancer, except for the number of inpatient visits among patients with colorectal cancer.

Conclusion

PIM use was significantly associated with greater healthcare utilization and higher healthcare costs in this population. Future research should be undertaken to obtain additional evidence that can aid in the optimization of integrated interdisciplinary programs to facilitate effective management of care for older patients with cancer and other co-morbid medical problems.

Disponible en: https://www.geriatriconcology.net/article/S1879-4068(19)30008-6/fulltext

DRUGS AND AGING

Sex Differences in the Prevalent Use of Oral Formulations of Cholinesterase Inhibitors in Older Adults with Dementia

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Abstract

Background
Cholinesterase inhibitors (ChEIs) are one of only two drug therapies available to manage cognitive decline in dementia. Given sex-specific differences in medication access and effects, it is important to understand how ChEIs are used by women and men.

Objective
The objective of this study was to provide contemporary sex-stratified evidence on patterns of ChEI use by community-dwelling older adults with dementia to inform opportunities to optimize drug prescribing.

Methods
We conducted a population-based cross-sectional study examining ChEI use in older adults with dementia in Ontario, Canada. We identified all community-dwelling individuals aged 66 years and older with a pre-existing diagnosis of dementia as of 1 April, 2016. We examined the prevalence of ChEI use among women and men separately, and explored the association between ChEI use and age, sex, income status, geographic location of residence, use of palliative care services, comorbidity, and polypharmacy. Concurrent use of drugs known to impair cognition (including antipsychotics, benzodiazepines, and medications with strong anticholinergic properties) was separately assessed among women and men using multivariable analyses and prevalence risk ratios.

Results
Of 74,799 women and 52,231 men living with dementia in the community, nearly 30% currently were using a ChEI (29.3% women, 28.6% men). Close to 70% of users were receiving the target therapeutic dose. Compared to men, women were less often taking the target therapeutic dose (67.8% women vs. 71.6% men, $p < 0.001$). Over 20% of users also were using drugs known to impair cognition, while being treated for cognitive decline using ChEIs. Compared to men, women were more often concurrently using drugs known to impair cognition (23.9% women vs. 21.8% men, $p < 0.001$).

Conclusions
This is one of the first studies of ChEI use to account for important sex differences. The results remind clinicians and researchers that patterns of ChEI therapy use differ by sex, as women were less likely to receive target therapeutic doses and more vulnerable to potentially problematic polypharmacy than men.

Disponible en: https://link.springer.com/article/10.1007/s40266-019-00690-9

JOURNAL OF THE AMERICAN GERIATRICS SOCIETY

Frailty Is Related to Subjective Cognitive Decline in Older Women without Dementia

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Abstract

OBJECTIVES

Physical frailty (or loss of physiologic reserve) is associated with cognitive impairment and dementia. Subjective cognitive decline (SCD) may represent early pathologic changes of dementia. The association between these disease markers is unclear.

DESIGN Cross-sectional analysis.

SETTING Community-based participants from the Vanderbilt Memory & Aging Project.

PARTICIPANTS

A total of 306 older adults with normal cognition (NC; n = 174) or mild cognitive impairment (MCI; n = 132).

MEASUREMENTS

Frailty was measured using standard methods, and a composite frailty score was calculated. SCD was quantified using the Everyday Cognition Scale (ECog; total score and four domain scores). Objective cognition was assessed with the Montreal Cognitive Assessment (MoCA). Proportional odds models, stratified by sex, related the frailty composite to MoCA and total ECog score adjusting for age, education, body mass index, cognitive diagnosis, depressed mood, Framingham Stroke Risk Profile, apolipoprotein E (APOE ε4) carrier status, and height (for gait speed models). Secondary models related individual frailty components to SCD domains and explored associations in NC only.

RESULTS

In women, frailty composite was related to MoCA (odds ratio [OR] = .56; P = .04), a finding attenuated in sensitivity analysis (OR = .59; P = .08). Frailty composite related to ECog total (OR = 2.27; P = .02), planning (OR = 2.63; P = .02), and organization scores (OR = 2.39; P = .03). Increasing gait speed related to lower ECog total (OR = .06; P = .003) and memory scores (OR = .03; P < .001). Grip strength related to lower ECog planning score (OR = .91; P = .04). In men, frailty was unrelated to objective and subjective cognition (P values >.07). Findings were consistent in the NC group.

CONCLUSION

Frailty component and composite scores are related to SCD before the presence of overt dementia. Results suggest that this association is present before overt cognitive impairment. Results suggest a possible sex difference in the clinical manifestation of frailty, with primary associations noted in women. Further studies should investigate mechanisms linking early changes among frailty, SCD, and cognition.

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The MedSafer Study: A Controlled Trial of an Electronic Decision Support Tool for Deprescribing in Acute Care

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Abstract

OBJECTIVES
Polypharmacy is common, costly, and harmful for hospitalized older adults. Scalable strategies to reduce the burden of potentially inappropriate medications (PIMs) are needed. We sought to leverage medication reconciliation in hospitalized older adults by pairing with MedSafer, an electronic decision support tool for deprescribing.

DESIGN This was a nonrandomized controlled before-and-after study.

SETTING The study took place on four internal medicine clinical teaching units.

PARTICIPANTS
Subjects were aged 65 years and older, had an expected prognosis of 3 or more months, and were taking five or more usual home medications.

INTERVENTION
In the baseline phase, patients received usual care that was medication reconciliation. Patients in the intervention arm also had a “deprescribing opportunity report” generated by MedSafer and provided to their in-hospital treating team.

MEASUREMENTS
The primary outcome was ascertained at the time of hospital discharge and was the proportion of patients who had one or more PIMs deprescribed.

RESULTS
A total of 1066 patients were enrolled, and deprescribing opportunities were present for 873 (82%; 418 during the control and 455 during the intervention phases, respectively). The proportion of patients with one or more PIMs deprescribed at discharge increased from 46.9% in the control period to 54.7% in the intervention period with an adjusted absolute risk difference of 8.3% (2.9%-13.9%). Not all classes of drugs in the intervention arm were associated with an increase in deprescribing, and new PIM starts were equally common in both arms of the study.

CONCLUSION
Using an electronic decision support tool for deprescribing, we increased the proportion of patients with one or more PIMs deprescribed at hospital discharge as compared with usual care. Although this type of intervention may help address medication overload in hospitalized patients, it also underscores the importance of powering future trials for a reduction in adverse drug events.

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REVISTAS FARMACÉUTICAS

BRITISH JOURNAL OF CLINICAL PHARMACOLOGY

Anticholinergic medicines use among older adults before and after initiating dementia medicines

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Abstract

Aims
We investigated anticholinergic medicines use among older adults initiating dementia medicines.

Methods
We used Pharmaceutical Benefits Scheme dispensing claims to identify patients who initiated donepezil, rivastigmine, galantamine or memantine between 1 January 2013 and 30 June 2017 (after a period of ≥180 days with no dispensing of these medicines) and remained on therapy for ≥180 days (n = 4393), and dispensed anticholinergic medicines in the 180 days before and after initiating dementia medicines. We further examined anticholinergic medicines prescribed by a prescriber other than the one initiating dementia medicines.

Results
One-third of the study cohort (1439/4393) was exposed to anticholinergic medicines up to 180 days before or after initiating dementia medicines. Among patients exposed to anticholinergic medicines, 46% (659/1439) had the same medicine dispensed before and after initiating dementia medicines. The proportion of patients dispensed anticholinergic medicines increased by 2.5% (95% confidence interval [CI]: 1.3–3.7) after initiating dementia medicines. Antipsychotics use increased by 10.1% (95% CI: 7.6–12.7) after initiating dementia medicines; driven by increased risperidone use (7.3%, 95% CI: 5.3–9.3). Nearly half of patients dispensed anticholinergic medicines in the 180 days after (537/1133), were prescribed anticholinergic medicines by a prescriber other than the one initiating dementia medicines.

Conclusion
Use of anticholinergic medicines is common among patients initiating dementia medicines and this occurs against a backdrop of widespread campaigns to reduce irrational medicine combinations in this vulnerable population. Decisions about deprescribing medicines with questionable benefit among patients with dementia may be complicated by conflicting recommendations in prescribing guidelines.

Disponible en: https://bpspubs.onlinelibrary.wiley.com/doi/epdf/10.1111/bcp.13976

The effect of providing prescribing recommendations on appropriate prescribing: A cluster-randomized controlled trial in older adults in a preoperative setting

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Abstract

Aims

The Systematic Tool to Reduce Inappropriate Prescribing is a method to assess patient's medication and has been incorporated into a clinical decision support system: STRIP Assistant. Our aim was to evaluate the effect of recommendations generated using STRIP Assistant on appropriate prescribing and mortality in a preoperative setting.

Methods

This cluster-randomized controlled trial was carried out at the preoperative geriatric outpatient clinic. Residents who performed a comprehensive geriatric assessment were randomized to the control group and intervention group in a 1:1 ratio. Visiting patients aged 70 years or older on 5 or more medications were included. Intervention: prescribing recommendations were generated by a physician using STRIP Assistant and given to the resident. Control group residents performed a medication review according to usual care.

Primary outcome: number of medication changes made because of potential prescribing omissions (PPOs), potentially inappropriate medications (PIMs), and suboptimal dosages according to the prescribing recommendations. Secondary outcome: 3-month postoperative mortality.

Results

65 intervention and 59 control patients were included, attended by 34 residents. Significantly more medication changes because of PPOs and PIMs were made in the intervention group than in the control group (PPOs 26.2% vs 3.4%, odds ratio 0.04 [95% confidence interval 0.003–0.46] $P < .05$; PIMS 46.2% vs 15.3% odds ratio 0.14 [95% confidence interval 0.07–0.57] $P < .005$). There were no differences in dose adjustments or in postoperative mortality.

Conclusion

Prescribing recommendations generated with the help of STRIP Assistant improved appropriate prescribing in a preoperative geriatric outpatient clinic but did not affect postoperative mortality.

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THE SENIOR CARE PHARMACIST

Pharmacist-Driven Step-Down of Long-Term Proton-Pump Inhibitor Therapy

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Abstract

OBJECTIVE
To evaluate the appropriateness of proton-pump inhibitor (PPI) prescribing and reduce the number of outpatients on long-term PPI therapy, defined as greater than or equal to one year.

DESIGN
Phase I was retrospective and evaluated the appropriateness of PPI prescribing. Phase II was prospective and involved implementation of a pharmacist-driven PPI step-down protocol.

SETTING
This study was conducted in an outpatient setting at Veterans Affairs Hudson Valley Health Care System.

PATIENTS, PARTICIPANTS
Patients were limited to a single primary care provider and were required to fill an outpatient PPI prescription between August 15, 2015, and August 15, 2016.

INTERVENTIONS
After patients were identified in Phase I as having an inappropriate indication for long-term PPI therapy, they were contacted by a pharmacist to complete the step-down protocol. The patients then received a call two weeks after completing each step.

MAIN OUTCOME MEASURE(S)
To determine the number of patients without an indication for long-term PPI therapy that could successfully complete the PPI step-down protocol.

RESULTS
Phase I identified that long-term PPI therapy was not indicated in 68.4% of patients. Phase II implementation demonstrated that 71.4% of patients were able to successfully step-down from PPI therapy in an average of 13 weeks with the use of alternative acid-suppression therapy.

CONCLUSION
This study concluded that a majority of PPI prescriptions were not indicated for a duration of greater than or equal to 1 year. With the implementation of a pharmacist-driven PPI step-down protocol, a majority of patients were able to tolerate the PPI step-down with the use of alternative acidsuppression therapy.

Disponible en: https://www.ingentaconnect.com/contentone/ascp/tscp/2019/00000034/00000008/art00006

REVISTAS DE MEDICINA GENERAL

JAMDA: JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION

A New Functional Classification Based on Frailty and Disability Stratifies the Risk for Mortality Among Older Adults: The FRADEA Study

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Abstract

Objectives
The aim of the current study was to investigate whether a new functional classification, based on basic (BADL) and instrumental (IADL) activities of daily living and frailty, is associated with mortality in older adults during 10 years of follow-up.

Design
Cohort study, with a follow-up of 10 years.

Setting and participants
A total of 924 participants aged 70 and older from the Frailty and Dependence in Albacete (FRADEA) study, a population-based sample of Spanish older adults.

Measures
At baseline, a new functional classification of 8 categories was constructed with limitations in BADL using the Barthel Index, limitations in IADL using the Lawton IADL Index, and the criteria of the frailty phenotype. Associations with 10-year mortality were assessed using Kaplan-Meier curves and Cox proportional hazard models.

Results
The risk of mortality gradually increased toward the less functionally independent end of the classification. The presence of mild, moderate, or severe BADL impairment was associated with mortality, in models adjusted for age, sex, comorbidity and institutionalization. The analyses also revealed that those who were BADL independent, IADL dependent and prefrail [hazard ratio (HR) = 2.27, 95% confidence interval (CI) = 1.22-4.20], and those who were BADL independent and frail (HR = 3.74, 95% CI = 1.88-7.42) had an increased risk of mortality.

Conclusions/implications
A new functional classification composed of BADL, IADL, and frailty representing the functional continuum is effective in stratifying the risk for mortality in older adults. Frailty is a high-mortality-risk state close to subjects with mild disability in BADL, needing an intensive specialized approach. Prefrailty with any impairment in IADL has an intermediate mortality risk and should be offered primary care interventions.

Disponible en: https://www.jamda.com/article/S1525-8610(19)30156-2/fulltext

Deprescribing in Nursing Home Residents on Polypharmacy: Incidence and Associated Factors

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Abstract

Objectives

To assess 1-year incidence and factors related to deprescribing in nursing home (NH) residents in Europe.

Design

Longitudinal multicenter cohort study based on data from the Services and Health for Elderly in Long TERm care (SHELTER) study.

Setting

NHs in Europe and Israel.

Participants

1843 NH residents on polypharmacy.

Methods

Polypharmacy was defined as the concurrent use of 5 or more medications. Deprescribing was defined as a reduction in the number of medications used over the study period. Residents were followed for 12 months.

Results

Residents in the study sample were using a mean number of 8.6 (standard deviation 2.9) medications at the baseline assessment. Deprescribing was observed in 658 residents (35.7%). Cognitive impairment (mild/moderate impairment vs intact, odds ratio [OR] 1.41, 95% confidence interval [CI] 1.11-1.79; severe impairment vs intact, OR 1.60, 95% CI 1.23-2.09), presence of the geriatrician within the facility staff (OR 1.41, 95% CI 1.15-1.72), and number of medications used at baseline (OR 1.10, 95% CI 1.06-1.14) were associated with higher probabilities of deprescribing. In contrast, female gender (OR 0.76, 95% CI 0.61-0.96), heart failure (OR 0.69, 95% CI 0.53-0.89), and cancer (OR 0.64, 95% CI 0.45-0.90) were associated with a lower probability of deprescribing.

Conclusions and Implications

Deprescribing is common in NH residents on polypharmacy, and it is associated with individual and organizational factors. More evidence is needed on deprescribing, and clear strategies on how to withdraw medications should be defined in the future.

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ATENCIÓN PRIMARIA

Manejo de la hiperglucemia con fármacos no insulínicos en pacientes adultos con diabetes tipo 2

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RESUMEN

El adecuado tratamiento de la diabetes mellitus tipo2 (DM2) incluye la alimentación saludable y el ejercicio (150min/semana) como pilares básicos. Para el tratamiento farmacológico, la metformina es el fármaco de elección inicial, salvo contraindicación o intolerancia; en caso de mal control, se dispone de 8 familias terapéuticas (6 orales y 2 inyectables) como posibles combinaciones. Se presenta un algoritmo y unas recomendaciones para el tratamiento de la DM2. En prevención secundaria cardiovascular se recomienda asociar un inhibidor del cotransportador sodio-glucosa tipo2 (iSGLT2) o un agonista del receptor de glucagon-like peptide-1 (arGLP1) en pacientes con obesidad. En prevención primaria, si el paciente presenta obesidad o sobrepeso la metformina deberá combinarse con iSGLT2, arGLP1 o inhibidores de la dipeptidilpeptidasa tipo4 (iDPP4). Si el paciente no presenta obesidad, podrán emplearse los iDPP4, los iSGLT2 o la gliclazida, sulfonilurea recomendada por su menor tendencia a la hipoglucemia.

Disponible en: https://www.elsevier.es/es-revista-atencion-primaria-27-articulo-manejo-hiperglucemia-con-farmacos-no-S0212656719302197

JAMA INTERNAL MEDICINE

Adverse Events in Long-term Care Residents Transitioning From Hospital Back to Nursing Home

Alok Kapoor, Terry Field, Steven Handler, et al

Abstract

Importance Transition from hospital to nursing home is a high-risk period for adverse events in long-term care (LTC) residents. Adverse events include harms from medical care, including failure to provide appropriate care.

Objective To report the incidence, type, severity, and preventability of adverse events in LTC residents transitioning from hospital back to the same LTC facility.

Design, Setting, and Participants Prospective cohort study of LTC residents discharged from hospital back to LTC from March 1, 2016, to December 31, 2017, and followed up for 45 days. In a random sample of 32 nursing homes located in 6 New England states, 555 LTC residents were selected, contributing 762 transitions from hospital back to the same LTC facility.

Main Outcomes and Measures The main outcome was an adverse event within the 45-day period after transition from hospital back to nursing home. Trained nurse abstractors reviewed nursing home records for the period, and then 2 physicians independently reviewed each potential adverse event to determine whether harm occurred and to characterize the type, severity, and preventability of each event. When reviewers disagreed, they met to reach consensus.

Results Of the 555 individual residents, 365 (65.6%) were female, and the mean (SD) age at the time of discharge was 82.2 (11.5) years. Five hundred twenty (93.7%) were non-Hispanic white, 21 (3.8%) were non-Hispanic black, 9 (1.6%) were Hispanic, and 5 (0.9%) were of other non-Hispanic race/ethnicity. In the cohort, there were 379 adverse events among 762 discharges. One hundred ninety-seven events (52.0%) related to resident care, with pressure ulcers, skin tears, and falls with injury representing the most common types of events in this category. Health care–acquired infections (108 [28.5%]) and adverse drug events (64 [16.9%]) were the next most common. One hundred ninety-eight (52.2%) adverse events were characterized as less serious. However, 145 (38.3%) events were deemed serious, 28 (7.4%) life-threatening, and 8 (2.1%) fatal. In terms of preventability, 267 (70.4%) adverse events were found to be preventable or ameliorable, with less serious events more often considered preventable or ameliorable (146 [73.7%]) compared with more severe events (121 [66.9%]). In addition, resident care–related adverse events such as fall with injury, skin tear, and pressure ulcer were more commonly deemed preventable (173 of 197 [87.8%]) compared with adverse drug events (39 of 64 [60.9%]) or health care–acquired infections (49 of 108 [45.4%]).

Conclusions and Relevance Adverse events developed in nearly 4 of 10 of discharges from hospital back to LTC. Most were preventable or ameliorable. Standardized reporting of events and better coordination and information transfer across settings are potential ways to prevent adverse events in LTC residents.

Disponible en: https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2738783