



# REVISIÓN BIBLIOGRÁFICA **JUNIO 2019**: Selección de artículos

## **REVISTAS GERIÁTRICAS**

### **EUROPEAN GERIATRIC MEDICINE**

#### **Prescription and deprescription of medications for older adults receiving palliative care during the last 3 months of life: a single-center retrospective cohort study**

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##### **Abstract**

##### **Purpose**

Near the end of life, drugs to ensure comfort and improve quality of life should be prioritized, and unnecessary drugs should be avoided. The aim was to assess the evolution and quality of drug therapy throughout the last 3 months of life of older adults in need of palliative care.

##### **Methods**

A single-center retrospective cohort study included older adults ( $\geq 65$  years) who died in a teaching hospital between 1 January 2014 and 30 June 2014 and had been identified as patients in need of palliative care in their last 3 months of life. Drugs were collected from electronic medical records and defined as 'unnecessary' or 'essential' based on a review of the literature.

##### **Results**

A total of 149 patients were included [age: 82.1 (SD 8.6) years, women: 46.3%]. The mean number of medications varied from 6.7 (SD 3.3) drugs 90 days before death, to 7.5 (SD 4.1) 7 days before death, to 5.6 (SD 3.6) on the day of death. During the final week of life, one additional prescription of essential drugs was observed for 75.2% of patients and 79.3% of patients had at least one unnecessary drug deprescribed. The most prescribed and deprescribed drug classes were, respectively, analgesics (56.4%) and antithrombotic agents (38.2%) during the last week of life.

##### **Conclusions**

Near the end of life, medication therapy is adapted to the goals of palliative care. However, this only occurs during the last week of life. Earlier transition to palliative care is necessary to avoid exposure to unnecessary drugs.

Disponible en: <https://link.springer.com/article/10.1007/s41999-019-00175-3>



## Potentially inappropriate prescriptions of antithrombotic therapies in older outpatients: a French multicenter cross-sectional study

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### Abstract

#### Purpose

To assess the prevalence of inappropriate prescriptions of antithrombotic therapies (AT) in older outpatients and examine the associated factors.

#### Methods

A multicenter cross-sectional study was performed in 75 community pharmacies of 11 French districts. The study included 1178 patients aged  $\geq 75$  years filling a prescription from a general practitioner (GP) at a community pharmacy (mean [SD] age 83 [ $\pm 5.5$ ] years, 59% female, median prescribed drugs 7 [range 5–10]). 75 pharmacy students prospectively collected data from structured interviews with patients and from prescriptions into an electronic case report. Updated 2014 STOPP/START criteria regarding AT were applied to each prescription. Factors associated with  $\geq 1$  AT-STOPP criteria and  $\geq 1$  AT-START criteria were studied (multivariate analysis).

#### Results

22.6% patients featured  $\geq 1$  in AT-STOPP criteria and 12.4%  $\geq 1$  in AT-START criteria. The most frequent AT-STOPP and AT-START criteria were AT prescription despite a concurrent significant bleeding risk and lack of AT prescription for patients with chronic atrial fibrillation, respectively. Two factors were associated with  $\geq 1$  AT-STOPP criteria: polymedication ( $\geq 5$  drugs;  $p < 0.001$ ) and previous hospitalization for a serious adverse drug event (ADE;  $p = 0.007$ ). The only factor associated with  $\geq 1$  AT-START criteria was lack of information in the prescription regarding the duration of treatment.

#### Conclusion

Suboptimal prescribing of AT is common in GP's prescriptions for older autonomous outpatients. The currently process of prescribing AT to older autonomous patients must be improved. Special attention should be given to those with polymedication and those with a history of severe ADEs.

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# **GERIATRICS AND GERONTOLOGY INTERNATIONAL**

## **Medicine optimization strategy in an acute geriatric unit: The pharmacist in the geriatric team**

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### **Abstract**

#### **Aim**

Older patients admitted to acute geriatric units (AGU) frequently use many medications and are particularly vulnerable to adverse drug events, so specific interventions in this setting are required. In the present study, we describe a new medicine optimization strategy in an AGU, and explore its potential in reducing polypharmacy and improving medication appropriateness.

#### **Methods**

The present prospective study included patients aged  $\geq 75$  years who were admitted to an AGU in a tertiary hospital. An intervention based on a pharmacist clinical interview, medication history and a structured medication review within a comprehensive geriatric assessment was proposed. The differences regarding polypharmacy as the primary outcome ( $\geq 5$  chronic drugs), hyperpolypharmacy ( $\geq 10$ ), number of drugs, drug-related problems and Screening Tool of Older Person's Prescription/Screening Tool to Alert Doctors to Right Treatment criteria between admission and discharge were evaluated.

#### **Results**

From October 2016 to April 2017, 234 patients were enrolled, aged 87.6 years (SD 4.6 years); 143 (61.1%) were women. The intervention resulted in a statistically significant improvement in polypharmacy ( $-10.2\%$ , 95% CI  $-15.3$ ,  $-5.2$ ), hyperpolypharmacy ( $-16.6\%$ , 95% CI  $-22.3$   $-11.0$ ), number of medications ( $-1.4$ , 95% CI  $-1.8$ ,  $-1.0$ ), Screening Tool of Older Person's Prescription criteria ( $-19.2\%$ , 95% CI  $-24.9$ ,  $-13.6$ ), Screening Tool to Alert Doctors to Right Treatment criteria ( $-6.8\%$ , 95% CI  $-10.1$ ,  $-3.5$ ) and drug-related problems ( $-2.7$ , 95% CI  $-2.9$ ,  $-2.4$ ;  $P \leq 0.001$  for all).

#### **Conclusions**

A systematic pharmacist-led intervention at hospital admission to an AGU within a comprehensive geriatric assessment was associated to a decrease in polypharmacy, drug-related problems and potentially inappropriate prescribing.

Disponible en: <https://onlinelibrary.wiley.com/doi/10.1111/ggi.13659>



# **INTERNATIONAL JOURNAL OF GERIATRIC PSYCHIATRY**

## **Anticholinergic burden before and after hospitalization in older adults with dementia: Increase due to antipsychotic medications**

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### **Abstract**

#### **Objectives**

To evaluate changes in the use of antipsychotics and medications with anticholinergic activity (MACs) during hospitalization in older adults with dementia and factors associated with antipsychotic prescriptions and increased anticholinergic burden (ACB).

#### **Methods and design**

This retrospective cohort study included all patients aged 65 years or older with a discharge diagnosis of dementia hospitalized at the university hospital of Udine, Italy, from 2012 to 2014. Medications dispensed within 3 months before and after hospitalization were identified in community-pharmacy dispensations while those prescribed at discharge were collected from Hospital Electronic Medical Records (EMR). ACB was assessed using the Anticholinergic Cognitive Burden score.

#### **Results**

Among 1908 patients included, at discharge, 37.0% used one or more antipsychotic (9.4% before and 12.6% after hospitalization), 68.6% used one or more MAC (49.1% and 45.7%, respectively), and ACB of 38.4% of patients increased at discharge mainly because of a higher use of antipsychotics with anticholinergic activity (33% at discharge vs 12% before hospitalization). Prescription of antipsychotics at discharge was associated with prior treatment with antipsychotics (adjusted odds ratio [aOR] 4.85; 95%CI, 3.37-6.97), psychiatric conditions, (4.39; 3.47-5.54) and discharge from surgical department (2.17; 1.32-3.55). An increased ACB was associated with psychiatric conditions (1.91; 1.52-2.39), discharge from surgical (1.75; 1.09-2.80) or medical department (1.50; 1.04-2.17), and with cardiac insufficiency (1.41; 1.00-1.99).

#### **Conclusions**

ACB was higher at discharge, and antipsychotics were the main drivers of this increase. Clinicians treating older adults with dementia should be aware of the risks associated with antipsychotics and that some of these medications may increase the risk of anticholinergic effects.

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# REVISTAS FARMACÉUTICAS

## INTERNATIONAL JOURNAL OF CLINICAL PHARMACY

### Consequences of ignoring patient diagnoses when using the 2015 Updated Beers Criteria

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#### **Abstract**

##### **Background**

Beers Criteria are one of the best known explicit criteria to identify inappropriate medication in elderly that can be used in medication review. The access to patients' medical records may be different among healthcare professionals and settings and, subsequently, the identification of patients' diagnoses may be compromised.

##### **Objective**

To assess the consequences of ignoring patient diagnoses when applying 2015 Beers Criteria to identify potentially inappropriate medication (PIM).

##### **Setting**

Three nursing homes in Central Portugal. *Method:* Medical records of nursing home residents over 65 years old were appraised to identify medication profile and medical conditions. 2015 Beers Criteria were used with and without considering patients' diagnoses. To compare the number of PIM and PIM-qualifying criteria complied in these two judgements, Wilcoxon signed-rank tests were performed.

##### **Main outcome measure**

Number of PIMs and number of PIM-qualifying criteria.

##### **Results**

A total of 185 patients with a mean age of 86.7 years (SD = 7.8) with a majority of female (70.3%) were studied. When assessing the patients with full access to the diagnoses, median number of PIMs was 4 (IQR 0–10) and number of PIM-qualifying criteria was 5 (IQR 0–15). When evaluating only patient current medication, median number of PIMs was 4 (IQR 0–10) and PIM-qualifying criteria was 4 (IQR 0–12). Statistical difference was found in the number of PIM-qualifying criteria identified ( $p < 0.001$ ), but not in the number of PIMs per patient ( $p = 0.090$ ). In 171 patients (92.4%) PIMs identified were identical when using or ignoring their medical diagnoses. However, in 80 patients (43.2%) the PIM-qualifying criteria complied were different with and without access to patient diagnoses.

##### **Conclusion**

Although restricted access to patients' diagnoses may limit the judgement of Beers PIM-qualifying criteria, this limitation had no effect on the number of PIM identified.

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## **JOURNAL OF CLINICAL PHARMACY AND THERAPEUTICS**

### **Potentially inappropriate medications with risk of cardiovascular adverse events in the elderly: A systematic review of tools addressing inappropriate prescribing**

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#### **Summary**

##### **What is known and objective**

In the last decades, many lists have been developed to screen for inappropriate prescribing. However, information on which potentially inappropriate medications (PIMs) could increase the cardiovascular risk in the elderly is not objectively presented. This review aimed to identify and quantify those PIMs by extracting information from published PIM-lists.

##### **Methods**

In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Statement (PRISMA), a systematic review of PIM-lists was conducted. The search strategy was run in PubMed, MEDLINE and Google Scholar (1991-09/2017). All PIMs described in those lists were extracted and stratified by their potential cardiovascular risk (including major adverse cardiovascular events—MACE). The number of times each PIM was reported on those lists was also assessed.

##### **Results and discussion**

We identified 724 papers, and 24 were retained. From those, a total of 17 PIMs to be avoided by the elderly and 21 drug-disease interactions were retrieved. The reporting of PIMs with risk of cardiovascular adverse events was 15.3%, whereas the reporting of those with MACE risk was 7.2%. PIMs most frequently described were tricyclic antidepressants (TCAs; 12/24), centrally acting antiadrenergic agents (11/24), NSAIDs (7/24), antiarrhythmics (Class I and III; 6/24), peripherally acting antiadrenergic agents (6/24) and antithrombotic agents (5/24). Most frequently described PIMs with MACE risk were NSAIDs (7/24), antiarrhythmics (Class I and III) (7/24), selective calcium channel blockers with vascular effects (6/24) and antipsychotics (4/24).

##### **What is new and conclusion**

Data suggest that PIM-lists focus mainly on common adverse events and often poorly describe the potential consequence for MACE occurrence. This systematic review could help healthcare professionals in the identification and deprescribing of these medicines in older patients with high cardiovascular risk during medication review.

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## REVISTAS DE MEDICINA GENERAL

### ANNALS OF INTERNAL MEDICINE

#### **2018 Cholesterol Clinical Practice Guidelines: Synopsis of the 2018 American Heart Association/American College of Cardiology/Multisociety Cholesterol Guideline\***

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#### **Abstract**

##### **Description:**

In November 2018, the American Heart Association and American College of Cardiology (AHA/ACC) released a new clinical practice guideline on cholesterol management. It was accompanied by a risk assessment report on primary prevention of atherosclerotic cardiovascular disease (ASCVD).

##### **Methods:**

A panel of experts free of recent and relevant industry-related conflicts was chosen to carry out systematic reviews and meta-analyses of randomized controlled trials (RCTs) that examined cardiovascular outcomes. High-quality observational studies were used for estimation of ASCVD risk. An independent panel systematically reviewed RCT evidence about the benefits and risks of adding nonstatin medications to statin therapy compared with receiving statin therapy alone in persons who have or are at high risk for ASCVD.

##### **Recommendation:**

The guideline endorses a heart-healthy lifestyle beginning in childhood to reduce lifetime risk for ASCVD. It contains several new features compared with the 2013 guideline. For secondary prevention, patients at very high risk may be candidates for adding nonstatin medications (ezetimibe or proprotein convertase subtilisin/kexin type 9 [PCSK9] inhibitors) to statin therapy. In primary prevention, a clinician–patient risk discussion is still strongly recommended before a decision is made about statin treatment. The AHA/ACC risk calculator first triages patients into 4 risk categories. Those at intermediate risk deserve a focused clinician–patient discussion before initiation of statin therapy. Among intermediate-risk patients, identification of risk-enhancing factors and coronary artery calcium testing can assist in the decision to use a statin. Compared with the 2013 guideline, the new guideline gives more attention to percentage reduction in low-density lipoprotein cholesterol as a treatment goal and to long-term monitoring of therapeutic efficacy. To simplify monitoring, nonfasting lipid measurements are allowed.

Disponible en: <https://annals.org/aim/fullarticle/2734785/2018-cholesterol-clinical-practice-guidelines-synopsis-2018-american-heart-association>



# **NEW ENGLAND JOURNAL OF MEDICINE**

## **Nonnarcotic Methods of Pain Management**

Nanna B. Finnerup

### **Abstract**

Pain is “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or [is] described in terms of such damage” when there is no physical derangement.<sup>1</sup> The function of pain is to protect the body by making the organism aware of damaging events and to promote healing by causing sensitivity to movement or other stimuli that may delay recovery. However, pain is not always related to tissue damage and does not always serve a protective function. This is the case with neuropathic pain, which is caused by a lesion or disease of the somatosensory parts of the nervous system, and with some other chronic pain conditions, such as fibromyalgia and migraine.<sup>2</sup> Acute and chronic pain may cause suffering and interfere with daily life, factors that influence the choice of treatment. Acute pain is the most common reason for visiting an emergency department,<sup>3</sup> and surgical procedures are often associated with acute postoperative pain.<sup>4,5</sup> Chronic pain also causes suffering, as reflected by the finding in the Global Burden of Disease Study 2013 that chronic low back pain was the leading cause of years lived with disability.<sup>6</sup> In addition to the contribution of pain to disability, that study showed that the associated problem of opioid use disorders accounted for 5.8 million additional years lived with disability,<sup>6</sup> an observation that underpins attempts to treat pain with drugs other than opioids. Long-term opioid administration has minimal effects on chronic pain and can cause tolerance, drowsiness, and dependence, as well as impaired memory, concentration, and judgment.<sup>7</sup> For these reasons, the International Association for the Study of Pain recommends caution in prescribing opioids for chronic pain,<sup>8</sup> and there has been an increased emphasis on the use of nonopioid pain management. The choice of treatment for pain depends on many factors, and the heterogeneity and large number of acute and chronic pain conditions preclude a general treatment algorithm. In cooperation with the World Health Organization, the International Association for the Study of Pain has developed a classification of chronic pain for the 11th revision of the International Classification of Diseases<sup>2</sup> (Table 1), and a similar classification has been proposed for acute pain,<sup>5</sup> providing the bases for facilitating treatment pathways

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