Supported in part by a cooperative agreement No. 90AL0011-01-00 from the Administration on Aging, Administration for Community Living, U.S. Department of Health and Human Services. Grantees carrying out projects under government sponsorship are encouraged to express freely their findings and conclusions. Therefore, points of view or opinions do not necessarily represent official AoA, ACL, or DHHS policy. The grant was awarded to University of Hawaii Center on Aging for the Alzheimer’s Disease Initiative: Specialized Supportive Services Program.
Reducing Polypharmacy in Dementia patients

April 25, 2017

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WHAT IS THE PROBLEM?

- Causes more cognitive impairment – ASEs
- Reduced quality of life for the patient
- Harm to the patient in form of disability, pain, nausea, avoidable injuries
- Caregiver/decision makers’ lack of awareness of the disability and lack of oversight of care
- Nearly 30% of Emergency room visits d/t medications result in hospital admission *

* P. Gallagher1, C. Ryan2, S. Byrne2, J. Kennedy2 and D. O’Mahony3
STOPP (Screening Tool of Older Person’s Prescriptions) and START (Screening Tool to Alert doctors to Right Treatment). Consensus validation; International Journal of Clinical Pharmacology and Therapeutics, Vol. 46 – No. 2/2008 (72-83)
For the Elderly, what 2 drugs are most often responsible for ED visits?

- A. Methamphetamine and Methadone
- B. Insulin and Warfarin
- C. Glipizide and Digoxin
- D. Amiodarone and Glyburide

B. Insulin and Warfarin
POLYPHARMACY DEFINITIONS

- Taking many medications
- Taking too much of a drug
- Multiple drugs in same class
- Drugs that are not needed
- Drugs that are ineffective
- Drugs used to treat side effects caused by another drug
- Drugs that interact with other drugs
POLYPHARMACY PROBLEMS

ADVERSE SIDE EFFECTS

- Nausea/Vomiting
- Confusion
- Constipation
- ANOREXIA
- Abdominal Pain
- FALLS/Fractures
- Bleeding
- Edema (swelling)
- Kidney damage

- Loose Stools
- High Blood Pressure
- Head Injury-Subdural
- “Super Bugs” (C. Diff etc)
- Very low blood sugars
- Urinary retention/incontinence
- Blood Clots
- Pulmonary Fibrosis
- Death
POLYPHARMACY OUTCOMES

- **INCREASED HEALTH CARE COSTS**
  - For the unnecessary drugs
  - For the costs of treating the adverse problems
    - Falls, Fractures, Bleeding in the head
    - Gastrointestinal Bleeding
    - Kidney Failure
    - Heart Failure

- **INCREASED INDIRECT COSTS**
  - Placement in Nursing Home
  - Law suits, malpractice insurance
  - Increased staffing needs
WHERE TO START?

THE BEERS LIST

- Evidence Based
- Found at www.AmericanGeriatrics.org
- Potentially Inappropriate Medications in Elderly
- First Developed by Dr. Mark Beers
Beer’s List of Potentially Inappropriate Medications (PIMS) in Elderly – Beer’s List to Print on American Geriatrics Society (AGS) website. Also app called “Geriatrics At Your Fingertips” has lookup feature. $9.99/yr for members

Alternatives for medications listed in AGS Beer’s List – Alternative medications for PIMS

More Tip Sheets from AGS foundation

http://myagsonline.americangeriatrics.org/new-item/new-item5
**HOW CAN WE IMPROVE?**

**CHOOSING WISELY**

- Developed with the American Board of Internal Medicine Foundations and AGS; Part 1 & Part 2
- AGS Choosing Wisely – 10 Things to questions about medications and tests for older adults. [AGS Choosing Wisely](#)
Don’t use **ANTIPSYCHOTICS** as the first choice to treat Neuro-Psychiatric Symptoms of Dementia (NPSD)

- PAIN
- CONSTIPATION
- HUNGER
- COLD
Antipsychotics have black box warning for increased risk of Mortality in the form of stroke and heart attack

NOT FDA approved for behavioral & psychological symptoms in dementia (NPSD)

Atypicals in psychosis: Aripiprazole, Olanzapine, Risperidone, Quetiapine

Conventional: Haloperidol-use sparingly/low dose
Avoid using **DIABETES** medication other than metformin to achieve hemoglobin A1c <7.5% in most older adults; moderate control better to avoid **Hypoglycemia** (Should be updated to include DDP-4 Inhibitors (Gliptins))

- A1c=7.5
  - FBS=140mg
  - eAG=168mg

- A1c=8
  - FBS=154mg
  - eAG=183mg

- A1c=8.5
  - FBS=168mg
  - eAG=198mg

**A1c=** Hemoglobin A1c; **FBS=** Fasting Blood Sugar; mg/dL; **eAG=** estimated average glucose
CHOOSING WISELY-Benzodiazepines

- Don’t use **BENZODIAZEPINES*** or other sedative – hypnotics in older adults as first choice or Insomnia, agitation or delirium
  - Look for underlying cause of sleep problems!
  - Must be weaned to avoid severe adverse withdrawal effects-if on habitually
  - Are used for alcohol withdrawal
  - Implicated in aspiration pneumonia in Dementia patients

* lorazepam, alprazolam, temezepam, diazepam, chlordiazepoxide, clonezepam
Don’t use **ANTIMICROBIALS** to treat bacteriuria in older adults unless specific urinary tract symptoms are present (dysuria, gross hematuria, suprapubic pain, + fever or leukocytosis +pyuria)

It is a myth that change in mental status, falls or urinary frequency are symptoms of a urinary tract infection in the non-catheterized patient. Look for other causes in those cases.
Urinary frequency in patients with dementia is often a matter of the brain disorder itself when experiencing acute illness (encephalopathy).

Attending to treating their pain, and other comfort needs and distraction is the best solution.

Psychotropic drugs and some antibiotics can cause “akathisia” (severe distressing restlessness – especially in anemia) causing or worsening urinary frequency.
Don’t prescribe AcetylCholinesterase Inhibitors (AChEI) for dementia without periodic assessment for perceived cognitive benefits and adverse gastrointestinal and cardiac effects.

Indicated for early to moderate Alzheimer’s Disease

3 Brands equally but modestly effective;
- Donepezil
- Galantamine
- Rivastigmine
Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults;

Instead, optimize social support, discontinue medications that interfere with eating, provide appealing food and assist.

Clarify Goals and expectations.
EATING PROBLEMS

- Avoid medications **not** specifically aimed at treating the real problem.
- Avoid “Appetite Stimulants” – There are none approved by FDA for the elderly, nor is there supportive quality medical evidence.
- The underlying problem needs attention!
- Medications are the MOST common cause of anorexia in the elderly with unintended wt loss.
- Avoid Over the Counter Weight Loss Supplements. They are NOT FDA approved.
DRUGS THAT CAN CAUSE ANOREXIA

- Acetylcholinesterase Inhibitors
  - Donepezil, Galantamine, Rivastigmine
- Antidepressants; (Bupropion, fluoxetine, & other SSRIs, SNRIs) Mirtazapine is an exception
- Digoxin – narrow therapeutic range in elderly
- Amiodarone & other antiarrhythmics
- Narcotics
- Alpha Blockers
- Antiseizure medications (Topiramate, Lamictyl)
- Metformin
Other Causes of Anorexia in Elders

- CONSTIPATION
- Depression
- Cancer (cytokines)
- Rheumatoid Arthritis
- Heart Failure
- Dementia – decreased hunger and pleasure from food
- Possibly other drugs – consider Alpha Blockers (Doxazosin, Tamsulosin, Prazosin)
More to avoid

GASTROINTESTINAL Drugs to avoid

- Proton Pump Inhibitors (PPIs) to reduce stomach acid: omeprazole, lansoprazole, pantoprazole, esomeprazole, without clear goals or guidance
- Have side effects: change in acidity of stomach with resulting decreased absorption of vitamins and minerals (Vit B-12, Iron, Calcium)
- Implicated in increased rates of respiratory infections and clostridium difficile
KNOW THY ANTICHOLINERGIC DRUGS

ANTICHOLINERGIC drugs – AVOID

- Older Antihistamines (chlorpheniramine, brompheniramine)-in many cold medications and cough syrups
- Benadryl (Diphenhydramine)
- TYLENOL PM!!! – Its Tylenol + Benadryl
- Drugs for Overactive Bladder (OAB)
- Some Antipsychotic medications
- Parkinson’s Drugs (Artane, Cogentin), but may be unavoidable
  - PS: These drugs block Donepezil etc
ANTICHOLINERGIC DRUG EFFECTS

- DRY mouth
- Blurry vision
- CONSTIPATION
- Urinary Retention
- CONFUSION
- Falls due to hypotension
- Delirium including Hallucinations and Agitation
- Cumulative Effect with multiple Drugs
Medication RECONCILIATION at every opportunity (especially between locations)

- At Every Provider Visit
- Take a detailed list, and, preferably, the bottles to appointments
- Your provider does not remember exactly what you are taking
- NO, the computer does not know what you are taking – your provider can only guess
QUESTIONS ??😊
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