When Wrong Things Happen with Medications: Risk and Prevention

by

Donna Miller, MD
Director, Geriatrics Institute
St. Luke's Hospital & Health Network
Bethlehem, PA

Reviewed and updated, Fall 2006  Reviewers: Johanne Louis-Taylor, MSN, CRNP and GEC Series Editors

Delaware Valley Geriatric Education Center

Learning Objectives

At the end of this module you will be able to:

1. Describe common causes of adverse drug events

2. Describe best drug prescribing practices for nursing homes

3. Describe roles of health care professionals and caregivers in medication management

4. Describe how quality improvement can be used to prevent adverse drug events
Adverse Drug Event (ADE)

What is an Adverse Drug Event?

An adverse drug event is “an injury resulting from the use of a drug”

Adverse Drug Event (ADE)

Why pay attention to ADE’s?

Many people suffer injuries and even death from ADE’s each year

- Many ADE’s are preventable, especially the more serious ones
- Nursing Homes have high rates of ADEs: nearly 2 million each year in the U.S.
Most Common and Preventable ADEs in Outpatient Care

- Kidney (e.g. abnormal levels of waste products, dehydration)
- GI: (abdominal pain, diarrhea, constipation)
- Bleeding
- Sugar/Diabetes

Most Common and Preventable ADEs in Nursing Homes

- Neuropsychiatric: (oversedation, confusion, hallucinations and delirium)
- GI: (abdominal pain, diarrhea, constipation)
- Bleeding
- Kidney (e.g. abnormal levels of waste products, dehydration)
Nursing Homes Have High Rates of ADEs

In an average facility of 100 beds, every year, there will be:

- 120 ADEs
- Nearly half are preventable
- 28% are fatal, life threatening or serious

Preventable ADEs are linked to common mistakes.

What Mistakes Lead to High Rates of ADEs?

- **Prescribing** (wrong dose, wrong drug)
- Transcription: transferring orders manually onto med sheet
- Dispensing
- Drug administration
- **Monitoring** (poor response to signs of drug toxicity)
Which Older Persons Are Most At Risk for ADE’s?

- Persons taking more medications
- Persons taking drugs from several categories
- Persons taking:
  - Anti-coagulants
  - Anti-psychotics
  - Antibiotics
  - Seizure medications
  - Diuretics

Drug Use Among Older Persons

**In the community:**
- 40% of those over 65 use **5 or more drugs** per week
- 12% use **10 or more** different medications
- Over the counter medications

**In nursing homes:**
- Average **6 – 8 drugs** per resident
- One-quarter (25%) of all residents use > **9 medications**
- One-half (50%) are “prn” drugs
Why So Many Meds?

- Older persons have multiple chronic medical conditions
- Many conditions are treated with multiple drugs
- Physicians feel “pressured” to prescribe
- Prescribing by telephone is common in nursing homes

Who’s on the Medication Team?

- Physician or NP Prescriber
- Nurse
- Pharmacist
- Direct care staff (DCS): CNA, personal care aide, or other
- Patient
- Family
**All Team Members Are Alert to the Five Rights**

- Right Patient
- Right Drug
- Right Dose
- Right Time
- Right Route

**Medication Team:**

**Prescribing Physician or NP**

Use best prescribing practices
- Best drug or combination for condition
- Start low and go slow
- Avoid drug-drug interactions
- Avoid potential drug-disease interactions

Monitor drugs and patient reaction as needed

Provide individualized medical care
Medication Team: Prescribing Physician or NP

In the Nursing Home

- Verify the need for each drug
- Record diagnosis for each drug
- Record results of drug monitoring
- Collaborate with Consulting Pharmacists
- Be aware of OBRA regulations regarding prescribing
- Collaborate with Quality Improvement efforts re medications

Medication Team: Nurse

- Administer medications
- Inform staff of drug changes and possible side effects
- Encourage staff reporting
- Educate patients about medications and how to report problems
- Use best nursing practices
- Monitor and keep records
- Safeguard against potential errors
Medication Team: Direct Care Staff

- Observe patients for reactions to medication changes
- Report changes in patients to nurses
- Provide direct care following best practice guidelines
- Work in your team to solve medication problems

Medication Team: Pharmacist

- Perform periodic drug review
- Safeguard against potential errors
- Work as a member of the team
- Educate team members
Medication Team: Patients and Families

- Communicate new complaints to caregivers and health care team
- Learn about their current and new medications
- Check medicines each time they are taken
- Report any side effects of medications

Medication Team and QI

- In any setting with a QI process, be involved in monitoring and problem solving
- Refer medication problems to QI team
- Involve all medication team members in identifying root causes of problems
Videotape “When Wrong Things Happen...”

The first segment of this video contains two scenes. Please watch the segment with these questions in mind:
- Do you see examples of good nursing practice?
- Do you see conditions that could lead to adverse drug events?

Videotape “When Wrong Things Happen...”

The second segment of this video shows a QI team meeting about the medication event involving Mrs. Saeger. How does each of the team members contribute to solving the problem?
- Administrator
- Consulting pharmacist
- Nurse
- Direct Care Staff (CNA)
Learning Objectives: Did we meet them?

Are you now able to:
1. Describe common causes of adverse drug events?
2. Describe best drug prescribing practices?
3. Describe roles of 4 health care professionals and caregivers in medication management?
4. Describe a quality improvement approach to preventing adverse drug events?

References


References


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Thank you for your attention!