The presenter does not have an actual, potential or perceived conflict of interest.
Learning Outcomes

- Discuss two consequences of polypharmacy
- Discuss the nurse’s role in addressing polypharmacy
Definition

• Polypharmacy, the use of five or more medications at one time
The nurse’s role in education, care coordination, communication, and regular medication reconciliation is vital to improve outcomes.
• Adults 65 and older compose 13% of the U. S. population yet account for more than 1/3 of overall outpatient spending on prescription medications

• A study of several nursing homes found at least one inappropriate medicine ordered for 50% of occupants
Aging Population

• By 2050, the population age 65 and over in the US is expected to reach 83.7 million, almost double 2012 numbers.

• The *oldest-old* (ages 85 and older) is estimated to grow from 5.9 million in 2012 to 8.9 million in 2030.
Physiological Changes in Older Adults
Physiological Changes in Older Adults

• Physically smaller due to decreased muscle mass, decalcification of bones, and degenerative joint changes.

• Cardiac output decreases

• Percent of body fat increases, amount of body water decreases
Physiological Changes in Older Adults

- Absorption, metabolism, and excretion rates decrease
- Kidney mass and renal blood flow decline - adults have 50% fewer nephrons by age 80
- Reduced liver function
Causes of Polypharmacy

Two or more chronic illnesses are present in 2/3 of person over age 65

Multiple pharmacy use - the concurrent use of two or more pharmacies in a year
Causes of Polypharmacy

Self diagnosis - use of over the counter (OTC) medications, herb supplements, and medications borrowed from friends and family members
Consequences of Polypharmacy

• Increased risk of Emergency Department visits

• Adverse Drug Reactions
Consequences of Polypharmacy

• Increased risk of a prescribing cascade, a new medicine given to treat an adverse reaction due to the incorrect reasoning that a new medical condition has developed

• With the initiation of each new medicine, the risk of an ADE intensifies: 15% with 2 medications, 58% with 5 medications.

• Older adults taking 7 or more medications, the risk of ADE is 82%.
Consequences of Polypharmacy

- Poor medication adherence
Consequences of Polypharmacy

- Financial costs
Consequences of Polypharmacy

- Increased risk for falls and associated injuries
- Decline in functional outcomes
Screening Tools

• Beer’s List

• STOPP - Screening Tool for Older Persons’ Potentially Inappropriate Prescription

• START - Screening Tool to Alert Doctors to the Right Treatments
Nurse’s Role in Polypharmacy

• Be aware of sudden mental, physical, or emotional changes

• Ask about challenges taking medications—confusion regarding scheduling, cost, swallowing
Nurse’s Role in Polypharmacy

- Assess medications at each visit, prescription and non prescription
- Encourage use of a single pharmacy
Nurse’s Role in Polypharmacy

- Identify all healthcare providers
- Monitor for ADEs and consider a new sign or symptom could be drug related
Summary

• Aging generates some predictable physiological changes
• The number of older adults with conditions necessitating multiple medications is escalating
• Polypharmacy has critical negative consequences for older adults
• Nurses play an important role in educating, monitoring, and advocating
Questions
References


References (cont’d)


