Polypharmacy

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The speaker has no financial relationships to disclose.
Disclosures

• In the past, Dr. Carlson has provided consulting services for Alkermes & Heron Therapeutics.

• Dr. Carlson has no other financial relationships with commercial interests to disclose.
Learning Objectives

• Define clinical pharmacotherapy
• Describe some common perceptions of the term polypharmacy
• Define polypharmacy
• Identify strategies for practicing clinical pharmacotherapy in psychiatric polypharmacy patients
Clinical Pharmacotherapy

• The concept of optimizing therapy and promoting health, wellness, and disease prevention with a focus on both pharmacologic and nonpharmacologic strategies.

• Take ownership of outcomes and ask questions to establish strategies.
Polypharmacy: Common Perceptions

THIRD PARTY
“we will not pay for all these medications”

PHYSICIAN
“eye-rolling; pharmacy is at it again”

PATIENT
“why do I need so many meds?”

PHARMACY
“polypharmacy is always bad”

GENERAL PUBLIC
“it’s crazy how many drugs people take”
Definitions of Polypharmacy\textsuperscript{1,2,3}

- No standard definition- no consensus
- Commonly defined by number of medications (often $\geq 5$)
- Also found in literature:
  - Inappropriate medications
  - Medications to treat other medications’ side effects
  - Excessive dose/duration
  - Diagnosis for medication no longer present
Other terminology\textsuperscript{1,2,3}

- “Hyperpharmacotherapy”
- “Overmedication”
- “Moderate polypharmacy”
- “Excessive polypharmacy”
Why does polypharmacy matter? 1,2,3,4

- Difficult to keep track of medications (especially older adults)
  - Missed doses, overdoses
  - Taking too often or not often enough (multiple drugs with different dosing schedules)
  - Short-term medications not being d/c’d

- Increased chance for drug-drug interactions
  - Examples: fall risk, hypotension, Beers list meds
  - CYP interactions
  - QTc prolongation

- Increased chance for adverse drug reaction (ADR)
  - 1/3 (33%) of older patients who are taking ≥ 5 medications will experience an ADR in the following year
Keep in mind: *legitimate* polypharmacy

- Disease state management
  - CHF
    - ACE-I, β-blocker, aldosterone antagonist
  - Diabetes
    - Often requires multiple medications
    - Comorbid disease state treatment
  - Hypertension
  - Cancer

- Risk of non-adherence increases as number of medications increases
Antipsychotic Polypharmacy (APP)\textsuperscript{5}

- Generally defined as \( \geq 2 \) antipsychotic medications in one patient
- Often used to manage refractory s/s of schizophrenia
- Pooled data from 147 studies between 1970s-2009
  - 82.9\% were schizophrenic patients \((n=1,418,163)\)
  - APP prevalence of 19.6\%
  - Interquartile range (IQR) 12.9\%-35\%
Psychiatric population: polypharmacy issues\textsuperscript{5,6}

- Complexity of medications used for psychiatric illness
- Patient non-adherence
- Patient refusal
- Patient thinks medications “don’t work” so they don’t take them
Why do we care about APP?\textsuperscript{7,8}

- Some states use reduction in APP as a quality-of-care target
- Joint Commission $\rightarrow$ accreditation
- More drugs $\rightarrow$ increased costs
- Difficult to ascertain which drug therapy is contributing to symptom improvements and/or adverse effects
The Joint Commission and Polypharmacy

- Defines polypharmacy as concurrent use of multiple medications in one patient — VAGUE!
- ↑ fall risk
- ↑ hospitalization
- ↑ disorientation
- ↑ medication administration errors
- Associated with ↑ mortality compared to monotherapy
Joint Commission: Types of Polypharmacy

- Same-Class
- Multiclass
- Adjunctive
- Augmentation
Conclusion

• “Make things as simple as possible. Never simpler”
  – Albert Einstein

• Sometimes multiple medications are necessary

• Sound clinical judgment, guideline-based approach
References