Skill-Building Workshop for on the Rational Use of Psychotropic Medications in Youth with Down Syndrome

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• This content is solely the responsibility of the authors and does not necessarily represent the official views of the Cabinet for Health and Family Services, Department for Medicaid Services, or Norton Healthcare
• Brand names and non-FDA approved indications for medications will be discussed
Educational Need/Practice Gap

Practice gap = Many children are treated with psychotropic polypharmacy with little evidence basis or guidance

Need = Deprescribing addresses a more rational approach to appropriate use of psychotropic medications (PM) in youth
Learning Objectives

Participants will:

• Gain knowledge about the concept of ‘deprescribing’ of psychotropic medications in children and adolescents as a systematic process of treatment

• Conduct deprescribing assessments and develop treatment plans using case studies and participant interaction

• Understand potential benefits and risks of deprescribing in the population
Outline

• Background information and introduction to deprescribing
• Breakout session for deprescribing
• Q/A and cases from the audience
Deprescribing

• Structured approach to drug treatment with a goal of “parsimonious use”
  • Evaluation of risk vs. benefit
  • Minimum number of medications
  • Minimum effective dose
  • Right amount of time
  • Consideration of individual’s goals, functioning, values, preferences

What psychotropic medications can do

• Level the biologic playing field
  • Control disabling symptoms such as hyperarousal, impulsivity
  • Treat established mental health disorders

• Allow youth to access and benefit from psychosocial therapy in the least restrictive setting
What psychotropic medications cannot do

• Change a child’s past experiences and how these experiences are part of the child’s identity
• Provide new coping skills
• Provide a sense of safety
Youth and polypharmacy: Ethical considerations

- Small evidence base for effect
  - Short-term mostly
- Higher rates of side effects
  - Metabolic syndrome
  - T2DM
- Developing brain
  - Assimilation vs. accommodation
  - Executive function and emotional regulation
- Justice and autonomy
CAHRDS SUP Deprescribing Project

- Track data on psychotropic medication utilization
- Provide awareness and training on deprescribing psychotropic medication in KY youth
- Develop and distribute toolkits and materials to guide stakeholders towards deprescribing psychotropic medications

SUP = State University Partnership
What is Deprescribing?
A chance to look at each medicine your child takes to know why they take it, and the pros and cons of taking it.

Why Deprescribe?
Some children take more medicines than needed. They could cause side effects or unknown effects.

What are psychotropic medicines?
They are used to treat mental health problems such as depression, ADHD and anxiety. They help manage mood, anger, attention, or sleep problems.

What can you do?
1. Talk to your child’s health provider
2. Keep track of your child’s medicines
3. Make sure your child takes their medicines as prescribed

Some Examples
- **Antipsychotics:**
  - Risperidone (Risperdal®)
  - Aripiprazole (Abilify®)

- **Antidepressants/anxiety:**
  - Fluoxetine (Prozac®)
  - Sertraline (Zoloft®)

- **Stimulants:**
  - Methylphenidate (Ritalin®)
  - Amphetamines (Adderall®)
What is Deprescribing?
A structured approach to evaluating medications for indications, risks, and benefits with a goal of a minimum effective dose and number of medications.

Why Deprescribe?
Some youth take more psychotropic medications (PM) than necessary. Youth are at higher risk of adverse and long-term effects.

When to consider deprescribing
- Improved condition
- Polypharmacy
- Age under 6 years old
- Youth/family request
- Lack of evidence to support use
- Medication side effects or non-compliance

How to deprescribe
1. Review factors which might favor deprescribing
2. Review medication history
3. Assess each medication for risk/benefit
4. Prioritize a medication to deprescribe
5. Implement taper and monitor
Steps to Take

Medication Review:
You, the parent/caregiver, and the youth should talk about each of the medications the youth is taking:

• Who prescribed it? What is the diagnosis or symptoms being treated? How long do they need to take it?
• What is the natural course of the condition?
• What is the expected benefit and what are the risks?
• How does it help? Is it causing any side effects?
The process of deprescribing

- Systematic benefit: risk analysis of each medication a child takes
  - Indications and evidence-base
  - Role within overall care of youth
  - Side effects – short/long term
  - Natural course of illness
  - Youth/family voice

- Periodic process
Concerning Psychotropic Medication Patterns

• **Too many (aka polypharmacy)**
  - Four (4) or more medications prescribed to a child
  - Does not apply to short and long-acting psychostimulants for ADHD

• **Too young**
  - Prescription of psychotropic medications to a child < 4 years of age

• **Same types**
  - Medications may have the same targets (e.g., sleep) or
  - Belong to the same category of medications (such as 2 or more antidepressants)
Concerning Psychotropic Medication Patterns

• Frequent changes of medications without reason
• Unclear diagnosis
  • You should know what the diagnosis is
  • Some medications have more than one use, like using an antidepressant for anxiety
• Doses too high or low
  • Low dose medications may be unnecessary, while high doses can cause more side effects
Is it the right time to deprescribe?

Consider deprescribing if:

• Concerning medication practices
• Less stress in the youth’s life now
• Things have improved with therapy
• The medications haven’t helped or made them feel worse
• Change in the youth’s health (pregnancy, drug abuse, illness)
Deprescribing in Down Syndrome

- Limited evidence base other than cholinesterase inhibitors for dementia
  - 2D6 substrate
- Side effects may worsen medical conditions
  - Cardiac
  - Obesity
  - Thyroid
  - Constipation
- Natural course of conditions
- Functional behavior analysis
- Catatonia vs. regression
- Youth/family voice

Palumbo and McDougle, *Expert Opinion on Pharmacotherapy*, 2018
CONSIDER ALL POTENTIAL CONTRIBUTORS TO I/PB

5a. Assess and address any CURRENT MEDICAL PROBLEMS
   Consider referral to SLP

5b. Assess and address any DIFFICULTIES USING FUNCTIONAL COMMUNICATION
   Consider referral to SLP

5c. Assess and address any PSYCHOSOCIAL STRESSORS
   Consider referral for an FBA

5d. Assess and address any MALADAPTIVE REINFORCEMENT PATTERNS
   Consider referral to specialist

5e. Assess and address any CO-OCcurring PSYCHIATRIC DISORDERS
   Consider referral to specialist

McGuire et al., Pediatrics, 2016
Steps to Take

Making a Decision:
• A decision will be made if there are medications to decrease or discontinue and what should be stopped first.

Follow-up:
• You and the youth/family will have a plan for gradually stopping the medication and making sure things remain stable.
• Continue therapy to address developmental concerns, mood or behavior problems.
• Systems of care approach.
The process of deprescribing

- Slow, logarithmic taper
- Implement evidence-based psychosocial therapies
  - Combination therapies
  - May allow taper to proceed
  - Might include parenting management or anger management
- Safety and relapse planning
The process of deprescribing

• **Stimulants**
  - Systemic-review: About 1/3 of children do not relapse or deteriorate when taken off medications for ADHD\(^1\)
  - Drug holidays are common, gradual taper over 2-3 months

• **Alpha-agonists**
  - Gradual taper by 50% every 3 days (urgent) or every month (routine)
  - Sleep hygiene

• **SSRI**
  - Logarithmic taper watching for discontinuation syndrome (least likely with fluoxetine)

\(^1\)Lohr et al., *Front. Psychiatry*, 2021
Possible Benefits of Deprescribing

- Reduced adverse drug reactions
- Improved rates of treatment compliance
- Cost
- Fosters development of coping strategies
  - Patient preference and values
Summary

• Deprescribing is a discussion between the provider and youth/family/guardians on rational use of psychotropic medication
• Deprescribing involves a systematic evaluation of the risks/benefits of each psychotropic medication to youth
• Visit our website: http://uofl.edu/KYsafemed or “KY safemed”
References

