Psychiatric Medications for Foster Youth: what we know and what we don’t
Implications for Child Welfare Practice

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Learning Objectives:

Understand the existing evidence-base for psychiatric medications for traumatized youth.

Learn about emerging research on psychiatric medication practice trends in child welfare systems.

Develop critical thinking skills in regards to the use of psychiatric medications for maltreated youth.
Introduction

Over the last decade there has been an exponential increase in the use of psychotropic medications prescribed for emotional and behavioral disorders in children, particularly preschoolers.
Introduction

Research into the effects of these medications lags behind prescribing trends.

These trends and the lack of research to support current practice have important implications for our work with traumatized children.
Trends in Prescribing Practices – Children with Emotional and Behavioral disorders

Approximately 4% of youth in the general population in 1996 received psychotropic medication, an almost three fold increase between 1987 and 1996 [from 1.4 per 100 youth in 1989 to 3.9 per 100 in 1996]

Trends in Prescribing Practices - Preschoolers:

Between 1991-1995 there was a 50% increase in the preschool (age 2-4) prescribing rate with 1.5% of preschoolers being prescribed stimulants or other psychotropic medication.

(JAMA 2000 238:8:1025-30)
Trends in Prescribing Practices - by drug class:

**Stimulant use increased 400%** (0.6 per 100 to 2.4) (ibid.)

**Antidepressant use increased > 300%** (0.3 per 100 to 1.0) (ibid.)

**600% increase** over a 10 year period in prescriptions of **antipsychotics** to pediatric outpatients in the U.S.

Trends in Prescribing Practices – Overall:

Prescribing of more than one psychotropic medication at a time increased greater than 600% (0.03 per 100 to 0.23)

Concomitant medication use is more common in youth treated by psychiatrists vs. those treated by pediatricians.

A survey of elementary school students in a Florida school district showed concomitant psychotropic use in 48% of psychiatrist-treated youth compared with just 6% of pediatrician treated youth. (J. Am. Acad. Child Adolesc. Psychiatry 1998:37: 968-976)

There is every indication these rates have continued or accelerated since this data was reported.
Children in the Child Welfare system are being prescribed psychiatric medications at an even higher rate.

Trends in Prescribing Practices - Child Welfare:

38% of the 32,000+ Texas foster care youth less than 19 years of age received a psychotropic prescription (Zito et al., 2008).

41% received three or more psychotropic drugs concomitantly.

By age group the 2005 annual prevalence of psychotropic medication was:

- 12.4% in 0-5 year olds;
- 55% in 6-12 year olds;
- 66.5% in 13-17 year olds.
Trends in Prescribing Practices—Child Welfare:

“When two-thirds of foster care adolescents receive treatment for emotional and behavioral problems, far in excess of the proportion in non-foster care population, we should have assurances that the youth are benefiting from such treatment.”

Lack of Safety and Efficacy Studies of Psychotropic medications for children

Brain continues to develop through adolescence

Impact of adding psychoactive medications to a developing brain is unknown
Lack of Safety and Efficacy Studies of Psychotropic medications for children

Medications that were safe for use in adults that had unanticipated side-effects for children:

- Aspirin > Reye’s syndrome
- Stimulants > growth effects
- Atypical Antipsychotics > significant weight gain (30-40 pounds) > diabetes and heart disease
### TABLE 3
Scientific Knowledge in Pediatric Psychopharmacology Versus Frequency of Use: A Mismatch?

<table>
<thead>
<tr>
<th>Category</th>
<th>Indication</th>
<th>Level of Supporting Data</th>
<th>Estimated Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Short-Term Efficacy</td>
<td>Long-Term Efficacy</td>
</tr>
<tr>
<td>Stimulants</td>
<td>ADHD</td>
<td>A</td>
<td>B</td>
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<tr>
<td>SSRIs</td>
<td>Major depression</td>
<td>B</td>
<td>C</td>
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<tr>
<td></td>
<td>OCD</td>
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<td></td>
<td>Anxiety disorders</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Central adrenergic agonists</td>
<td>Tourette's disorder</td>
<td>B</td>
<td>C</td>
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<tr>
<td></td>
<td>ADHD</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Valproate and carbamazepine</td>
<td>Bipolar disorders</td>
<td>C</td>
<td>C</td>
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<td></td>
<td>Aggressive conduct</td>
<td>C</td>
<td>C</td>
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<tr>
<td>TCAs</td>
<td>Major depression</td>
<td>C</td>
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<td></td>
<td>ADHD</td>
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<td>C</td>
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<tr>
<td>Benzodiazepines</td>
<td>Anxiety disorders</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Antipsychotics</td>
<td>Childhood schizophrenia &amp; psychoses</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Tourette's disorder</td>
<td>A</td>
<td>C</td>
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<tr>
<td>Lithium</td>
<td>Bipolar disorders</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Aggressive conduct</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

**Note:** NAMCS = National Ambulatory Medical Care Survey; SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant; ADHD = attention-deficit hyperactivity disorder; OCD = obsessive-compulsive disorder.

* A = adequate data to inform prescribing practices; for efficacy and short-term safety: ≥2 randomized controlled trials (RCTs) in youth; for long-term safety: epidemiological evidence and/or minimal adverse incident report to the Food and Drug Administration. B = for efficacy and short-term safety: 1 RCT in youth or mixed results from ≥2 RCTS.

* Safety data based on studies of children with seizure disorder.
Lack of Safety and Efficacy Studies: “Off-label” prescribing

FDA guidelines do not limit prescribing practice

Medications are developed privately by Pharmaceutical companies

FDA requires safety and efficacy studies for target population and target purpose only
Diagnosis

Diagnostic and Statistical Manual (DSM) was originally designed as a research instrument.

Problems with diagnoses lead to faulty treatment strategies, they serve as the foundation upon which treatment decisions are made.
Diagnosis

- Children must meet adult criteria for most of the major mental illnesses including Depression, Bipolar Disorder, Anxiety, PTSD, and Schizophrenia.
Diagnosis

Shift to increasingly defining behavior as biologically determined.

4000% (40 fold) increase in the diagnosis of Juvenile Bipolar disorder in the last decade.

Comorbidity being seen as the norm so each symptom becomes a focus of medication intervention.
Implications for Practice

Risk vs. benefit analyses are critical both in terms of treatment with medication or no treatment.

Need for full disclosure about what is known about the medication and what is not known (specific to the experience of use in children).
Implications for Practice

Risks of undertreatment:

Kindling theory

Earlier presentation of mental illness is associated with worse prognosis.

Ex. Bipolar disorder – 15% mortality rate in adults compared to risks from Lithium treatment.
Implications for Practice

Role of prescriber in the informed consent process.

Individual beliefs/values of the patient (youth and parents) must drive decision-making.

Review protocols are needed regarding psychotropic meds for child welfare.
Implications for Practice

Every child or adolescent has unique needs which require individualized treatment planning.

At times, the appropriate treatment for a specific child will fall outside the parameters of these guidelines. Such cases should be considered for review.
Implications for Practice

Medication should be integrated as part of a comprehensive treatment plan that includes:

- Appropriate behavior planning.
- Symptom and behavior monitoring.
- Communication between the prescribing clinician and the youth, parents, guardian, foster parents, therapist(s), pediatrician, school and any other relevant members of the child or youth’s treatment team.
Implications for Practice

Medication decisions should be:

• appropriate to the diagnosis of record,
• based on specific indications (i.e., target symptoms), and
• not made in lieu of other treatments or supports that the individual needs.
Implications for Practice

There should be an effort, over time, to adjust medications doses to the minimum dose at which a medication remains effective and side-effects are minimized.

Periodic attempts at taking the child off medication should also be tried and if not, the rationale for continuing the medication should be documented.
Implications for Practice

Medication decisions need to be based upon adequate information, including:

- Psychiatric history and assessment,
- Medication history,
- Medical history including known drug allergies, and
- Consideration of the individual’s complete current medication regimen (including non-psychoactive medications, e.g., antibiotics).
Medication monitoring guidelines:

A child on more than one medication from the same class (e.g., two anti-psychotic medications) should be supported by an explanation from the prescribing clinician and may warrant review.
Medication monitoring guidelines:

A child on more than three psychotropic medications should be supported by an explanation from the prescribing clinician and may warrant review.
Medication monitoring guidelines:

Medication dosages should be kept within FDA guidelines (when available).

The clinical wisdom, “start low and go slow” is particularly relevant when treating children in order to minimize side effects and to observe for therapeutic effects.

Any deviations from FDA guidelines should be supported by an explanation from the prescribing clinician and may warrant review.
Medication monitoring guidelines:

Unconventional treatments should be avoided.

Medications that have more data regarding safety and efficacy should be used over newly FDA-approved medications.

The risk vs. benefit of a medication trial needs to be considered and continually reassessed, and justification should be provided, where the benefit of a medication comes with certain risks or negative consequences.
Medication monitoring guidelines:

Medication management requires the informed consent of the parents or guardians and must address:

- risk/benefits,
- potential side-effects,
- availability of alternatives to medication,
- prognosis with proposed medication treatment and without medication treatment and the potential for drug interactions.
Medication monitoring guidelines:

Children on Psychotropic medications should be seen by their prescribing clinician no less that once every three months. This is a bare minimum.

Children in acute settings, displaying unsafe behavior, experiencing significant side-effects, or not responding to a medication trial or in an active phase of a medication trial should be seen more frequently.
Medication monitoring guidelines:

If laboratory tests are indicated to monitor therapeutic levels of a medication or to monitor potential organ system damage from a medication these lab studies should be performed every three months at a minimum (maintenance phase).

If the medication is being initiated in these lab studies will need to be performed more frequently until a baseline is achieved.
Consider using patient information handouts:

Helping Parents, Youth and Teachers Understand Medications for Behavioral and Emotional Problems:

A Resource Book of Medication Information Handouts (3rd Edition)

Edited by Mina K. Dulcan, M.D.
References

References