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

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Mental Health Needs of Youth in Foster Care

• Rates of emotional or behavioral disorders range from 50-80% of children in foster care (point prevalence rate) vs. 11-25% community-based rate.

• Rates of emotional or behavioral disorders correlate with histories of adverse childhood experiences including:
  • Abuse
  • Neglect
  • Domestic violence
  • Poverty
  • *In-utero* and environmental drug exposure
  • Genetic loading?
Lifelong Effects of Early Childhood Adversity and Toxic Stress

• The potential consequences of toxic stress in early childhood for the pathogenesis of adult disease are considerable.

• Behavioral level—evidence of strong link between early adversity > health threatening behaviors.

• Biological level—growing documentation of extent of cumulative stress over time and timing of specific environmental insults > structural and functional disruptions > physical and mental illness in adults.

(Shonkoff and Garner, Pediatrics Vol. 129, No. 1, January 2012)
Alumni of Child Welfare Outcomes

Lifetime prevalence of mental health disorders among adults who experienced stays in foster care exceeds the incidence rate of the general population

- PTSD 30% Alumni vs. 7.6% Gen Pop
- Major Depression 41.1% vs. 21% Gen Pop
- Panic disorder 21.1% vs. 4.8% Gen Pop
- GAD 19.1% vs. 7% Gen Pop
- Drug dependence 21% vs. 4.5% Gen Pop

(Northwest Alumni Study, Pecora et.al. 2005)
Psychotropic Medications for Youth

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.
Psychotropic Medications

- Also called psychiatric medications, they are defined by their function, helping to alleviate emotional or behavioral symptoms or conditions.
- Classes of psychotropic medications are also defined by their target symptoms:
  - Antipsychotic medications address psychotic symptoms but are also increasingly being used “off label” to treat aggression.
  - Mood stabilizers (ex. Lithium) are used to help stabilize mood swings typically associated with Bipolar disorder.
  - Stimulants are a class of medications used to treat ADHD
Safety and Efficacy

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.
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
<table>
<thead>
<tr>
<th>PROBLEM AREA</th>
<th>MEDICATION</th>
<th>SHORT-TERM EFFICACY</th>
<th>LONG-TERM EFFICACY</th>
<th>SHORT-TERM SAFETY#</th>
<th>LONG-TERM SAFETY#</th>
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<tr>
<td>Anxiety Disorders (including OCD*)</td>
<td>SSRIs (*FDA indications for OCD only) Benzodiazepines</td>
<td>A</td>
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<td>TCAs</td>
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<td>Alpha-2 Adrenergic Agonists*</td>
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<td>Aggression in Autism</td>
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<td>Carbamazepine</td>
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<td>Atypical antipsychotics</td>
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<tr>
<td>Bipolar Disorder</td>
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<td>Depression</td>
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<td>Buproprion</td>
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<td></td>
<td>Venlafaxine</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Schizophrenia (psychosis)</td>
<td>Antipsychotics*</td>
<td>A</td>
<td>C</td>
<td>A</td>
<td>C</td>
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<tr>
<td>Tourette’s Disorder</td>
<td>Antipsychotics* (haloperidol, pimozide)</td>
<td>A</td>
<td>C</td>
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<tr>
<td></td>
<td>Alpha-2 Adrenergic Agonists</td>
<td>B</td>
<td>C</td>
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SSRI = Selective Serotonin Reuptake Inhibitor  
TCA = Tricyclic Antidepressant  
Updated: November 1, 2010
The small print

- This tool was developed by Peter Jensen and the Reach Institute
- FDA approved medications for a given indication are marked with an asterisk*
- **A** = Adequate data to inform prescribing practices. For efficacy and safety: ≥ 2 randomized controlled trials (RCTs) in youth; **long-term efficacy and safety are defined based on studies lasting 6 months or longer**. Please note, for efficacy, “A” means that the agent is better than a comparator (usually placebo). For safety, “A” doesn’t mean “safe”, it merely indicates that the risks have been characterized in 2 or more carefully executed studies.

- **B** = For short- and long-term efficacy and short-term safety: 1 RCT in youth or mixed results from ≥ 2 RCTs. For long-term safety, only 1 careful prospective study lasting 6 months or more, or mixed results from ≥ 2 longitudinal studies.

- **C** = No controlled evidence or negative studies; case reports and FDA reports of adverse events only.
In 2005, 2.8 million children in Medicaid used behavioral health care, and of those, 1.7 million used psychotropic medications.

Behavioral health accounts for a disproportionate share of Medicaid spending for children, given the relatively small number of children who use behavioral health care.

CHILDREN USING BEHAVIORAL HEALTH CARE AS A PROPORTION OF TOTAL MEDICAID ENROLLMENT AND EXPENDITURES

Total Children in Medicaid = 29M

- **Children Using Behavioral Health Care**
- **Children Not Using Behavioral Health Care**


** Children using behavioral health care in 2005, N= 2,787,919.

Children in Medicaid from racially/ethnically diverse backgrounds are less likely than white children to use behavioral health services.

**MEDICAID ENROLLMENT AND BEHAVIORAL HEALTH SERVICE USE BY RACE/ETHNICITY**

<table>
<thead>
<tr>
<th>Category</th>
<th>All Children in Medicaid* (%)</th>
<th>Behavioral Health Service Users** (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH/PI, 0.6%</td>
<td>8.7***</td>
<td>8.6***</td>
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<tr>
<td>AI/AN, 1.5%</td>
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<tr>
<td>Asian, 2.2%</td>
<td>22%</td>
<td>12%</td>
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<tr>
<td>NH/PI, 0.3%</td>
<td></td>
<td></td>
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<tr>
<td>AI/AN, 1.5%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Asian, 0.6%</td>
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<td>Other/Unknown</td>
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<tr>
<td>Native Hawaiian or Pacific Islander</td>
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<tr>
<td>American Indian or Alaska Native</td>
<td></td>
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<tr>
<td>Asian</td>
<td></td>
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<tr>
<td>Hispanic or Latino</td>
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<tr>
<td>Black or African American</td>
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<tr>
<td>White</td>
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</tbody>
</table>

* All children in Medicaid in 2005, N = 29,050,305.
** Behavioral health service users in 2005, N = 1,958,908.
*** Other category includes: 2.9%, Hispanic or Latino, plus one or more races; 0.3%, more than one race; and 5.6%, unknown.

Adolescents, ages 13–18, represent 25% of the overall Medicaid child population, but 45% of children in Medicaid using behavioral health services, and nearly 60% of total behavioral health expenditures.

MEDICAID ENROLLMENT, BEHAVIORAL HEALTH SERVICE USE AND EXPENSE BY AGE GROUP

<table>
<thead>
<tr>
<th>Age Group</th>
<th>All Children in Medicaid*</th>
<th>Behavioral Health Service Use**</th>
<th>Behavioral Health Service Expense**</th>
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<tbody>
<tr>
<td>Ages 13–18</td>
<td>41%</td>
<td>11%</td>
<td>5%</td>
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<tr>
<td>Ages 6–12</td>
<td>34%</td>
<td>44%</td>
<td>36%</td>
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<tr>
<td>Ages 0–5</td>
<td>25%</td>
<td>45%</td>
<td>59%</td>
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</tbody>
</table>

* All children in Medicaid in 2005, N=29,050,305.
** Behavioral health service use and expense in 2005, N=1,958,908.

Children in foster care and those with SSI/disability eligibility together represent only 8% of the Medicaid child population, but their care accounts for 56% of total behavioral health spending.

MEDICAID ENROLLMENT, BEHAVIORAL HEALTH SERVICE USE, AND EXPENSE BY AID CATEGORY

- Foster Care
- SSI/Disability
- TANF

* All children in Medicaid in 2005, N=29,050,305.
** Behavioral Health service use and expense in 2005, N=1,958,908.

Children in Medicaid are frequently prescribed psychotropic medications, but only half of those getting medications receive accompanying behavioral health services.

* Based on all children in Medicaid receiving psychotropic medications in 2005, N = 1,686,387.

Children in foster care who are prescribed psychotropic medications are more likely than children in other aid categories to receive multiple medications, with 49% prescribed 2 or more, and close to 20% prescribed 3 or more.

CONCURRENT PSYCHOTROPIC MEDICATION USE AMONG CHILDREN IN MEDICAID

<table>
<thead>
<tr>
<th>Category</th>
<th># Medications Prescribed</th>
<th>TANF*</th>
<th>SSI/Disability**</th>
<th>Foster Care***</th>
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<tr>
<td></td>
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<td>1%</td>
<td>4%</td>
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<td>19%</td>
<td>13%</td>
<td>15%</td>
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<td>74%</td>
<td>29%</td>
<td>30%</td>
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<td>1%</td>
<td>46%</td>
<td>49%</td>
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<td>49%</td>
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*N=1,119,266  **N= 354,945  ***N= 212,176

Antipsychotic prescribing rates in Child Welfare:

- Rates of antipsychotic use increased from 8.9% in 2002 to 11.8% in 2007 (range from 2.8% in HI to 21.7% in TX). (Rubin, et. al. *Children and Youth Services Review*, 34(6), 2012)
- Use of antipsychotic medications is amongst the fastest growing class of psychiatric medications.
- Use in Medicaid-enrolled Children age 3-18 grew 62% between 2002 and 2007;
- ADHD is the most common diagnosis (39%, Bipolar 11%, ADHD and Bipolar 12%).

(Meredith Matone, David Rubin, Policy Lab at CHOP, 2012)
• Public Law (P.L.) 110-351 requires states to:
  • develop a plan for **ongoing oversight and coordination of health care services for children in foster care**, in coordination and consultation with the State title XIX (Medicaid) agency, pediatricians, and other experts in health care, as well as experts in and recipients of child welfare services.
  • The purpose of these requirements is to ensure that children in foster care receive high-quality, coordinated health care services, **including appropriate oversight of any needed prescription medicines**.

**Fostering Connections to Success and Increasing Adoptions Act of 2008**
Child and Family Services Improvement and Innovation Act (P.L. 112-34)

- Whereas the law had previously required that the plan address “oversight of prescription medicines,” the new provision builds on this requirement by specifying that the plan must include an outline of “protocols for the appropriate use and monitoring of psychotropic medications.”
- With the amendments made by P.L. 112-34, it is now a statutory requirement that oversight of psychotropic medications be explicitly addressed in the health care oversight and coordination plan.
The following factors may play a role in the patterns of psychotropic medication use in foster children:

- Insufficient State oversight and monitoring of psychotropic medication use;
- Gaps in coordination and continuity of medical and mental health care across public health and social service systems involved with affected children and their families;
- Provider shortages, especially of board-eligible and board-certified child and adolescent psychiatrists, in some geographic areas (e.g., rural areas); and
- Lack of access to effective non-pharmacological treatments in outpatient settings.
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.
Screening and Assessment

- Initial Health Screen (24-72 hours)
- Comprehensive Assessment (30-60 days)
- Sensitive to the unique needs and experiences of youth in child welfare custody
- Trauma
- *In-utero* environmental drug exposure
- Genetic loading/Family history of mental illness
- Purpose is to identify those needing services and supports and initiate a mental health treatment plan.
Components of an Oversight System

• Recognition that psychotropic medication use is a systems problem
• Collaboration among youth-serving organizations and stakeholders
• Mechanisms for identifying who needs psychotropic medication
• Access to professional guidance and up-to-date guidelines on clinical practices
• Informed decision-making/consent and medication monitoring
Components of an Oversight System

- Involvement of biological parents and youth in decision-making
- Feasible and employable state policy/guidelines
- Oversight program for monitoring population trends
- Fiscal, human, and technological resources
Medication Monitoring Approaches

Prospective
• Consultation
• Prior Authorization
• Mandatory Second Opinion

Retrospective
• Court Hearings
• Drug Utilization Review
• Data Trends
Monitor Prescribing Trends

- Variety of data sources:
  - SACWIS
  - Medicaid Claims Data
  - Mental health
  - Managed Care Plans
  - Population-level vs. individual case reviews or audits
  - Real time vs. periodic intervals
  - Merged databases
Promising Approaches

- Collaborate with Medicaid/MCOs, mental health, and Child Welfare to more accurately track trends via data sharing agreements.
- Require reporting by managed care plans/Medicaid
- Look at prescription patterns for individual children and overall by utilizing:
  - Audits of SACWIS records and Pharmacy claims data
  - Team reviews
  - Court hearings
  - Child and Family Services Reviews process
  - Medicaid/mental health data reports
Different State Approaches to Consent

- **Clinical Encounter Participants** (Prescriber, Foster Parent, Youth)
- **Child Welfare Worker**
- **Child Welfare Administrator**
- **Child Welfare Unit with Mental Health Expertise**
- **Expert Review Unit** (University, Other)
- **Court System**

**External Agencies**
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.
References


References