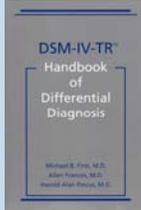


Diagnostic & Medication Overload of Older Youth in Foster Care: Preliminary Findings from a Psychiatric Nurse Review

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Background – Diagnoses



- Youth in child welfare have high rates of mental disorders & high rates of mental health service use
- Providers required to assign a diagnosis to bill for services
- Frequent placement moves and provider changes contribute to an accumulation of diagnoses over time

Background: Diagnostic Overload

I: **“What percentage of your kids have a diagnosis?”**
Everyone: **“All of them.”**

I: **“What percentage has more than one diagnosis?”**
R-1: **“Half.”**
R-2: **“90%.”**
R1: **“Yeah.”**
R-3: **“Because everyone has ADHD.”**
R-4: **“If they are under like 10 they have ADHD. If they are over 10 they have bipolar disorder.”**
R-1: **“They have posttraumatic stress disorder, that’s a big one. And adjustment disorder. Reactive attachment disorder.” (Laughter)**

Background - Medications



- Rates of psychiatric medication use have risen exponentially over the past 2 decades & these rates are particularly high among youth in foster care (e.g. dosReis et al, 2001; Thomas et al, 2006)
- Many youth in foster care are receiving multiple medications and multiple classes of medications (e.g., dosReis et al, 2005; Zito et al, 2008)

Drivers of quality problems

- Low medicaid reimbursement
- **Shotgun evaluations**
- Pressures to prescribe
- Routinized evaluations
- Liability concerns



Diagnoses + Medications = Permanency Problems

“As the medications and the diagnoses increase, these kids’ options decrease. They have many fewer available resources, whether it’s relatives or foster homes or even career foster homes that will consider placement because of this accumulation.”

(Child welfare professional)



Purpose

In response to these concerns, we developed a manualized diagnostic review process to be completed by a psychiatric nurse

Goals for the nurse review:

- Clarify diagnostic picture
- Compile medication history & identify meds that have helped in the past



The Diagnostic Review

Thorough case review using multiple informants including:

- Review of child welfare case record
- Interviews with:
 - young person
 - case worker
 - therapist
 - psychiatrist
 - other identified support people



The Diagnostic Review



- Conducted by Masters level nurse with 15 years psychiatric nursing experience
- Data was abstracted from charts using structured headings to organize notes. This data was used to guide interviews.
- Findings were compiled into a diagnostic summary and presented to family support team for feedback

Parent Study

- The review was conducted as part of a pilot intervention study, Treatment Foster Care for Older Youth
- Referrals for the study came from a private foster care agency in Missouri contracted to handle the most difficult youth in foster care
- Study youth were 16-18 years old, living in residential care, had mental health diagnoses and were taking psychiatric medications

Analysis

- Results from the diagnostic and medication reviews were entered into tables
- The authors met and discussed each case and the patterns across cases



Sample characteristics

- Pilot study of 8 youth
- 6 female, 2 male
- Average age 17.4
- 6 African American, 1 White, 1 Bi-racial
- Average of 13 previous placements with a range from 6-32 (self-reported)

Sample characteristics

Complex Maltreatment Histories

- 50% met criteria for moderate – severe physical abuse
- 25% met criteria for moderate to severe physical neglect
- 75% reported history of sexual abuse

(assessed in structured interviews using Child Trauma Questionnaire)

Sample characteristics - symptoms

Self-reported Diagnoses

(assessed with Diagnostic Interview Schedule IV)

- No current diagnosis – 25%
- Oppositional Defiant DO – 50%
- PTSD – 25%
- Mood Disorders – 25%
- ADHD – 12%
- Conduct Disorder – 12%

Nurse Review Results: Diagnostic Overload

Results – Diagnostic Overload

- Youth had received many previous diagnoses - an average of 6 major diagnoses per youth
- Everyone had been diagnosed with a mood disorder
- Behavioral disorders were also common
- Evidence of substance use and learning problems was common
- Evidence of diagnostic uncertainty – 7 of the 8 youth had current or past diagnosis with NOS or rule out specifiers



Medication Mayhem

Results - Medications

Youth were prescribed an average of 3.62 medications at intake (range 1-6) from an average of 2.75 classes



Youth had been on many different medications from many different classes, average of 12.87 medications (range 9-21) from an average of 5.1 different classes (range 4-7)

Results - Medications



- Antipsychotics were prevalent - Six of youth were taking them at intake, 4 of these were taking 2 or more
- Certain psychiatrists seemed to prefer certain medication combinations

Results – Side Effects



- All youth in the study had experienced documented side effects such as drowsiness, weight gain, or loss of appetite
- Some had experienced serious effects such as tardive dyskinesia and lithium toxicity
- Several youth had health conditions that have been associated with psychiatric medications such as type 2 diabetes, hypertension, obesity, and high cholesterol

Results of the Nurse Intervention

Diagnostic Review

- 5 young people had a **reduced** number of diagnoses following the review
- 2 young people had **no change** after the review
- 1 young person had **more** diagnoses following the review
- 7 of 8 still had mood disorder diagnoses
- 2 had behavioral disorder diagnoses
- 3 still had NOS specifiers



Results – Response to Intervention

Medication Review

- Recommendation for re-evaluation of medications in two cases
- Noted problematic side effects and symptoms to monitor
- Key source of info for the treatment team
- Not successful at influencing subsequent psychiatric practice



Discussion – Diagnostic Uncertainty

- These youth presented complicated diagnostic pictures – complex trauma histories, placement moves, problems in intellectual and social functioning, and substance use
- Their symptoms did not fit neatly into clear diagnostic categories – Even with extended evaluation, they were difficult to diagnose



Discussion – Diagnostic Uncertainty

- Multiple diagnoses with limited validity provided little guidance for providers about the best clinical course
- In the face of this uncertainty, some professionals appeared to favor particular diagnoses and particular types and combinations of medications
- Multiple medications lead to uncertainty about the effects of each and increased concerns about side effects

Diagnostic Uncertainty

"Theoretically, diagnoses drive the treatment plan. As I went along gathering so much data, I became less convinced that this is really the case. It seemed to me the providers were responding more in the moment to whatever crisis behaviors the young person presented. The usefulness of knowing the person's diagnosis didn't seem as relevant as knowing the young person's story." (Reflection from Psychiatric Nurse)

Discussion - Documentation

- Even at the time of referral, different diagnoses were found in child welfare case record and residential treatment chart
- Case documentation often lacked indications of why meds were assigned or changed and how well they worked
- Designated medication records generally did not accurately reflect the full history of medications



Implications

Our findings support the need for:

- Thorough assessments with a focus on clarifying and explicitly discarding old diagnoses
- Better documentation practices for recording the mental health histories of these youth
- Close clinical monitoring for side effects
- Portable medical summaries that help youth to convey complicated diagnosis and medication histories to facilitate continuity
- Psycho-education focused on symptoms rather than diagnoses

Limitations

- Our sample was composed of a particularly high needs group of young people that is not representative of all youth in foster care
- Sample is small and from one geographic area
- Review was conducted by one psychiatric nurse who used her own clinical judgment to assign diagnoses based on DSM-IV

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