CT Association of School Based Heath Centers
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Presentation

Presentation Title

Treatment Model for Individuals with a Diagnosis of Autism Spectrum Disorder

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Conference Program Description

The presentation addresses the question: Is Autism Spectrum Disorder (ASD) a Phenotype or Dimensional Structure of Symptoms? Six features of Comprehensive Treatment are identified, and examples of empirically-based practices. A Personalized Treatment Model is described, with three components: Psychopharmacological Management, Therapeutic Needs for Management, and Special Education Services. Case examples will illustrate these principles.

Session Content Plan (Abstract)

Key question that must be resolved prior to treatment planning: What is the validity of the separate nosologic types of ASD? Are the subtypes quantitatively distinct (phenotypes) or qualitative manifestations of the same disorder? Most recent research fails to distinguish between subtypes. These studies bifurcated individuals into two groups of High Functioning Autism (HFA) and Low Functioning Autism (LFA), or blended individuals into one group with a "typically developing group" for comparison. These threats to validity yield concern about the application of findings to treatment.

Some generalizations, however, can be made. The research ASD cluster scores indicate that a diagnosis of AS **and** low IQ (< 75) reveal poor performance on three types of tasks: 1) Theory of Mind; 2) Attribution; and 3) Divided Attention. Social skills and Adaptive Behavior composite scores are down by 2 sd (SD=16.9) for this LFA group.

Criteria for Comprehensive Treatment Models for Individuals with ASD describe an evaluation system endorsed by the American Evaluation Association. Six features of a Comprehensive treatment include: 1) Operationalized Practices (manuals illustrating what to do and how to do it); 2) Practices must be replicated; 3) Demonstrate types of empirical evidence, e.g., articles, book chapters, books; 4) Quality of Methodology; 5) Use of complementary evidence; and 6) Evaluation rating scales applied to practice.

Examples of practices empirically oriented include: 1) ABA design with single subject assignment; 2) Discrete trial training; 3) Prompting and Stimulus-Response Training; 4) Involve typically developed children; 5) High fidelity of implementation; 6) Use of psychometric inter-rater reliability; 7) Demonstrate peer review quality.

The parameters for a comprehensive treatment, plus the lack of evidence for a diagnostic nosology for each subtype of ASD, leads in the direction of a Personalized Treatment Algorithm, e.g., a set of rules to solve this problem.

A Personalized Treatment Model (PTM) requires identifying idiosyncrasies in each person's general diagnosis that is relevant to predicted treatment outcomes. This PTM approach to treatment indicates the following three part focus for treatment.

I Psychopharmacological Management:

- Genotyping to identify open or deficient pathways to drug metabolism and given medication options.
- Co-occurring conditions require treatment triage to maximize generalizations.
- Number of discontinued medication trials
- Historical polypharmacy
- Medication dose changes through and over time
- Medication synergies
- Unintended outcomes from particular prescriptive drug use: weight gain, cognitive function interference.

II Therapeutic Needs for Management

- Social and Developmental atypicalities
- Specific developmental strengths and deficits
- Family history of psychiatric diagnoses
- Clinical service history: individual, group, family or extended family therapy, partial hospital care, hospitalization
- Specific family stressors
- Treatment methods used and outcomes: CBT, Family Systems, Child-Parent Interactive therapy, etc.
- Fit of Treatment approaches to clinical diagnoses, as perceived by family and child
- GAF and Prognosis
- Genetic markers associated with current diagnoses

Goals

Short Term: Self-Regulation
Resiliency

Intermediate: Functional Social Judgment
Disclosure

Long-Term: Interpersonal Communication
Separation and Individuation from Family

III Special Education Services

A Student Role Performance
Assessment through time and over time
Reliability of observations (in vivo) teacher, mother, father, self
Targeted performance over time ***minus*** baseline data = treatment benefit

B Level of intervention for in-school services through time and over time, e.g., full inclusion, partial special classroom, shadow monitor, full special class, in-home supports, outplacement to day program, residential placement.

C Evidence-based outcomes plus unintended outcomes

D Evidence of regular, scheduled communication with parents

E Evidence of collaboration among professional disciplines: pediatrician, psychiatrist, developmental specialist, special educator, speech and language specialist, etc.

F Evidence of cohesive treatment and integrated services particular to an ASD individual's requirements

G Academic modifications: evidence-based procedures such as teacher verbal or visual demonstration, rehearsal, prompting, redirection strategies, backwards chaining for sequential instruction, active learning instructional methods, Virtual Lab and CAI (computer assisted instruction)

H School and classroom ecology designed to structure support and elicit student role behaviors for individuals with ASD diagnoses

I Safe school orientation personalized to provide standards of accountability for staff and students regarding bullying, victimization, mutual respect and peer support

J IEP written with personalized strategies to accommodate idiosyncrasies in student strengths and deficiencies with related assessment protocols:

1. Student role performance
2. Measures of retained academic skills
3. Measured ability to apply knowledge to real world problems
4. Self-regulation and classroom performance commensurate with the individual's developmental age
5. IEP fit with assessed transition to post-high school plans, e.g., social judgment, pragmatic language skills, self-regulation, college experience, vocational experience, independent living skills, and experience with competitive employment.