The Missing Piece: Helping Medication Prescribers Value and Interpret Behavior Data

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Objectives

• Understand the value of behavior data when determining the appropriateness and efficacy of psychoactive medication trials.

• Understand strategies to combat prescriber resistance to evaluate behavior data when making medication/treatment decisions.

• Understand behavior collection strategies for commonly occurring clinical concerns for adolescents and adults with ASD.

• Understand what types and presentations of data are most useful to medication prescribers.
Before the medication trial...

- What are the potential risks?

- How might an adverse reaction impact the individual and family?

- What is the likelihood of success?

- Has the proposed treatment course been scientifically validated?

- Are the assessment methods specified?*
Other Considerations...

- How will the medication trial be integrated into the other components of the individual’s treatment plan
- Be mindful of overvaluing interventions
Interpreting Research Results

- Not all research is created equal
- The design of the study significantly contributes to the strength of the research findings or observations
  - The stronger the research design, the more reliable the outcome
Case Report

• A detailed report of the diagnosis, treatment and follow-up of an individual patient

• Of limited benefit, aside from justifying pilot studies
Case Series

- A group or series of case reports involving patients who were given similar treatment. Reports of case series usually contain detailed information on diagnosis, treatment, response to treatment and follow-up

- Not hypothesis driven or controlled
Open Label Study

- A type of study in which both the health providers and the patients/caregivers are aware of the medication/intervention being given

- Used frequently as they are easier to conduct than randomized studies and avoid ethical issues of withholding treatment
Non-randomized Clinical Trial

- Trials in which treatment allocation was made by a strategy that would make the allocation known to the investigator before informed consent is obtained from the patient/caregiver
- An imbalance can occur in treatment allocation under such circumstances
Randomized, Controlled Clinical Trial

• The randomized, double-blind, controlled clinical trial is the gold standard of study design

• Provides protection from allocation bias by the investigator and from bias in assessment of outcomes by both the investigator and the patient/caregiver
Other things to consider

• The larger the “N” the better

• The more matched variables the better

• The longer the treatment phase the better

• The more assessment measures the better

• The smaller the “p” the better (should be 0.05 or less)
Understand the Intended Target

• Have realistic and clear expectations for the medication trial

• Communicate these expectations across the treatment team

• Critical to have behavior data to support (or refute) a medication’s efficacy
Optimal Medication Trial Data Collection

• Agree on a behavioral target which is easily operationalized in multiple environments

• Agree on data collection method and frequency

• Establish a baseline for the behavior prior to beginning the medication
During the Trial

• Collect data at agreed upon intervals and frequency

• Coordinate potential dose adjustments with other treatment interventions

• Give medication doses adequate time to demonstrate change (trends can take time to become clear)
Dealing with Prescriber Resistance

• Medical professionals do not get much training in behavior therapy
  
  • This is true for psychiatrists as well

• Usually have limited exposure to individuals with developmental challenges
  
  • Unfortunately, also true for psychiatrists

• Used to thinking of “signs” and “symptoms”
  
  • Reliance on self report
Redefining the behavior arc

- Antecedents: risk factors/clinical vulnerabilities
- Behaviors: signs and symptoms/clinical presentation
- Consequences: sequela/clinical outcomes
Considerations for prescribers

• Data should be able to be rapidly interpreted

• Phase lines marking:
  
  • Medication stops/starts/dose changes
  
  • Significant medical concerns
  
  • Major changes in treatment intervention

• Graphing extinction and promotion on same graph can be helpful
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Frequency of Physical Aggression and Somatic Complaints

No Lexapro

Lexapro Added

Number of Occurrences

February March April May

PA SC

PAautism.org

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Case Example: Aggression

• 24 year-old man with co-occurring ASD and moderate ID

• Direct care staff reporting increasing rates of aggression to others during community outings

• Current medications include low dose aripiprazole (Abilify) and medium dose sertraline (Zoloft)
Case Example: Aggression

• Functional assessment

• Establish baseline frequency:

• Prescriber formulation:
  • Behavior extinguished:
  • Behavior promoted:

• Potential medication adjustment:
Case Example: Anxiety

• 32 year-old woman with ASD, employed competitively and living semi-independently presenting with 2 month history of panic attacks at work and increasing social avoidance

• Meeting with psychiatrist for first time; currently on no psychotropic medications
Case Example: Anxiety

• Functional assessment:

• Establish baseline frequency:

• Prescriber formulation:

  • Behavior extinguished:

  • Behavior promoted:

• Potential medication trial:
Case Example: Complex Presentation

- 45 year-old man with co-occurring ASD and ID complicated by seizure disorder. Lives at home with his parents, attends a day program with an aide, receives community habilitation services.

- Presenting with increasing difficulties across environments (not sleeping at home, more disruptive at day program, darting and impulsive behaviors in the community). Long history of medication trials; currently on valproate and lamotrigine (Lamictal) for seizures; and risperidone (Risperdal) for irritability.
Case Example: Complex Presentation

• Functional assessment:

• Establish baseline frequency:

• Prescriber formulation:
  • Behavior extinguished:
  • Behavior promoted:

• Potential medication trial:
ASERT is funded by the Bureau of Autism Services, PA Department of Public Welfare

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