

Child Psychiatry: Clinical Challenges

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Objectives

- Appreciate the explanatory and intervention challenges in child mental health
- Appreciate problem prevalence and research status of interventions
- Discuss case scenarios
- Expand sense of comfort for working with kids

Jay

- Jay is an 10 year old boy was brought in by his mother (a fourth grade teacher) with concerns about his chronically poor grades, hyperactivity and problems getting his school work completed. He is a very popular boy known for his sense of humor. His twin brother gets straight "A's" but is noted to be shy and a worrier.
- Jay's Diagnoses:
 - Attention Deficit Hyperactivity Disorder
- Treatment:
 - Responded well to methylphenidate (following a double-blind placebo trial)
 - Making uses of the "class-clown" role
 - Any thoughts about his brother?

Mark

- As an 11 year old, Mark was brought to the hospital after attempting to "hijack" his school bus. He believed that his classmates thought he could succeed. He had become quite irritable and animated after Paxil had been added to his stimulant medication regimen. He had also been "successful" at getting into his father's marijuana stash.
- Mark's Diagnoses:
 - ADHD, initially
 - Oppositional Defiant Disorder
 - Now, Bipolar Disorder...and ADHD
 - Marijuana abuse
- Treatment:
 - Stimulants, SSRIs....
 - Replaced now by antipsychotic and lithium...still on stimulant
 - Calming the whole family...?yoga

Kevin

- Kevin, now age 15, was found wandering in the desert by the sheriff 15 months ago. He had a displaced fracture of his tibia. He told the ER team that his mother had run away and his father was either dead or coming to kill him. His mother had been living in a car in the yard of his family's rural home for the preceding 6 months. His father had become despondent and hostile.
- Kevin's Diagnoses:
 - Schizophrenia
 - Post-traumatic stress disorder
 - Pervasive developmental disorder features
 - Borderline mental retardation
- Treatment:
 - Antipsychotic and antidepressant medications
 - Vocational supports
 - Family supports (finding mother, supporting father)

Maryanne

- At age 13, Maryanne became convinced that she could not meet up to her own or her family's expectations. She is an accomplished cellist and rower. A year ago, she began cutting on her thighs to "ease the tension". After her primary care provider discovered her "secret" she started in group therapy and was placed on an antidepressant. She became fixated on death as her necessary destination and was hospitalized. During her hospitalization she revealed a preoccupation with purging and weight loss. Her parents also revealed that they had begun an "in-home separation"
- Maryanne's diagnoses:
 - Major depressive episode
 - Anxiety disorder, NOS
 - Eating disorder, NOS
 - ...worry about "cluster B"...
- Treatment:
 - Antidepressant, low dose antipsychotic
 - Soccer DBT, adventure therapy
 - Bolster humor, Wednesday church group maze
 - Home visit, family coaching, balancing Adkins/vegan

Child Psychiatry: Epidemiology

□ 5 to 15 percent with clinically significant disorders

□ Below age 12 years: Boys outnumber girls,
⇒ Higher rates of
behavioral/learning/developmental disorders

□ 12 to 18 years: Girls outnumber boys,
> Higher rates of anxiety/affective disorders

Related occurrences...

These can all co-occur... and fuel each other:

- depression and evolving bipolar disorder
- anxiety (including separation anxiety and obsessive compulsive anxiety)
- post-traumatic stress response (models)
- disruptive behavior problems
- substance use
- psychosis / prodromal schizophrenia
- reciprocal relatedness difficulties (Autistic--Asperger's spectrum ... its tough to be different)
- attentional and specific learning differences (verbal and non-verbal)
- organic response to "injury" (e.g. FAS, ARND, sha ken baby)
- mental retardation
- cultural passages, identity crisis, "antisocial" or "alternative social" modeling

ADHD Criteria: Inattention

- Six or more of the following for >6 mos
- (Must be maladaptive and inconsistent with developmental level)
 - careless with details
 - can't keep on task
 - doesn't seem to listen when spoken to
 - doesn't follow through with instructions
 - difficulty organizing
 - reluctant to put in effort for school or homework
 - often loses things necessary for activities
 - is easily distracted
 - is forgetful

ADHD Criteria: Hyperactivity-impulsivity

- Six or more of the following for >6 mos
 - Must be maladaptive and inconsistent with developmental (level)
- Hyperactivity
 - often fidgets with hands or feet or squirms in seat
 - often climbs or runs about ... or feels restless
 - difficulty playing or engaging in leisure
 - often leaves seat when expected to remain in seat
 - often is "on the go" or acts as if "driven by a motor"
 - often talks excessively
- Impulsivity
 - often blurts out answers before questions completely asked
 - has difficulty awaiting turn
 - often interrupts or intrudes on others

Early Onset Bipolar Disorder *Specificity of Symptoms*

Mania

ADHD

- | | |
|---------------------|---------------------|
| ☞ Irritability | ☞ Grumpy |
| ☞ Increased Energy | ☞ Hyperactive |
| ☞ Pressured Speech | ☞ Talking Fast |
| ☞ Reckless Behavior | ☞ Reckless Behavior |
| ☞ Grandiosity | ☞ Bragging |
| ☞ Distractibility | ☞ Distractibility |
| ☞ Decreased Sleep | ☞ Restless Sleeper |

Psychosis in children and adolescents

- Schizophrenia is much rarer than in adults
- Hallucinations in pre-adolescents are anxiety phenomena (until "proven" otherwise)
- Brief reactive psychosis
 - Obsessionality/anxiety
 - Post-traumatic stress disorder
- Psychosis frequently occurs in bi-polar mania ... and adolescent depression
- Organic contributors
 - Neurologic/endocrine
 - Eating disorders
 - Autistic spectrum struggles
 - mental retardation

Posttraumatic Stress Disorder

Traumatic Event

- Trauma may be acute or chronic
- Abuse a major factor in youth

Persistent Reexperiencing of the Event(s)

- Repetitive Play
- Nightmares
- Flashbacks/Intrusive Thoughts

Avoidance

Increased Arousal

Clinical Features of Depression in Kids

Children/Adolescents

- Somatic complaints
- Irritability: can be primary mood symptom
- Guilt
- Low self-esteem
- Suicide attempts
- Oppositionality
- Withdrawal

40% to 70% have “comorbid dx”:

Most common:

Anxiety disorders-20% to 40%
Disruptive - (incl. CD/ADHD) 10% to 80%
Substance abuse-20% to 30%

Natural History:

?7-9 mos.
?recurrent

SUICIDE

1. A leading cause (2nd or 3rd) of death in adolescents:
2. 12% of teen deaths are suicide
3. Suicidal ideation very common in adolescents: 20% per year
4. Suicide attempts: 10% per year
 - a. More common in females
 - b. More often completed in males
5. What do you say to a teen who reports suicidal feelings?
6. What are some major worries/ “red flags”?

Anorexia and Bulimia

■ Anorexia Nervosa

- Intense fear of gaining wt
- Disturbance in way body wt is experienced
- Absence of > 2 menstrual cycles

...watch the web...

“Ana’s Cabana, Dying to be thin”

Treatment approaches:
meal support, activity restriction, monitor electrolytes, EKG

■ Bulimia Nervosa

- Bingeing
- Sense of loss of control
- At least twice a wk
- Self-evaluation is unduly influenced by body shape/weight

Asperger’s Disorder

□ Impairment in Social Interaction

- Impaired Nonverbal Communication Skills
- Failure to develop appropriate peer relationships
- Lack of social interests/reciprocity

□ Restricted repetitive and stereotyped patterns of behavior

- Preoccupation with idiosyncratic interests
- Inflexible adherence to routines/rules
- Stereotypic motor mannerisms

□ If Clinically Significant Delays in Language, Cognitive Development and/or Adaptive Skills: Pervasive Developmental Disorder

Evidence Based Treatments in Child and Adolescent Psychiatry

McClellan and Werry, *JACAP*, 2003;42:1388-1400

Psychopharmacology:

- Most medication practices for psychiatric illnesses in youth based on anecdotal reports and/or adult literature
 - Essentially no literature examining combined therapies and polypharmacy
 - Limitations include small sample sizes, lack of controls, narrow diagnostic inclusion criteria and/or short duration of treatment
- ⇒ Most prescriptions for psychiatric indications in juveniles considered off-label (nonFDA approved)
- ⇒ NIH promoting large cooperative multisite trials to address these concerns

Stimulant Medications

- Short Term Effectiveness of Stimulants for ADHD well documented
 - > 160 published RCT, including studies with preschoolers and adults
 - 65 – 75 % response rate, compared to 5 – 30 % placebo response
 - Most Trials 12 weeks or less
 - Methylphenidate best studied, followed by dextroamphetamine, pemoline and mixed amphetamine salts (Concerta, Adderall, Metadate, etc)
 - FDA approved for ADHD (age 6 for MPH, age 3 for DEX)
 - ... now FDA “Black Box” warning for amphetamine salts: *cardiotoxicity*

Other Treatments for ADHD

- Atomoxetine (Strattera)
 - Noradrenergic-Reuptake Inhibitor
 - Positive RCT’s for ADHD in kids and adults
 - FDA approved for ADHD (6 years and older)
 - recent reports of liver failure
 - now also has FDA “Black box” warning

Other Treatments for ADHD (also prescribed for many other symptom clusters)

- Clonidine/Guanfacine
 - α – adrenergic Agonists
 - Only two small RCT’s support use for ADHD
 - Tourettes Syndrome Study Group
 - MPH vs Clonidine vs Combination vs Placebo
 - Multisite RCT (n = 136): ADHD plus Chronic Tic Disorder
 - Both agents and combination effective for ADHD, tics generally got better as well
 - Other Trials for Tourettes produced Mixed Results

The Uses for “Antidepressants” in Kids

- Depression
- Dysthymia
- Bi-polar Depression
- Generalized Anxiety (including Separation Anxiety Disorder)
- Panic Disorder
- Obsessive Compulsive Disorder
- Post-Traumatic Stress Disorder
- Enuresis
- Autism/Aspergers
- Attention Deficit Hyperactivity Disorder
- Headache/Chronic Pain

Where to turn for perspectives on Antidepressants

- To view the FDA's public advisory, please visit: <http://www.fda.gov/cder/drug/antidepressants/AntidepressantPHA.htm>
- - To view the FDA's information page on Antidepressant Use in Children, Adults and Adolescents, please visit: <http://www.fda.gov/cder/drug/antidepressants/default.htm>
- - To view the AACAP's resources on antidepressant use in children and adolescents, please visit: <http://www.aacap.org/Announcements/antidepressants.htm>

Tricyclic Antidepressants

Imipramine, Amitriptyline, Nortriptyline, Clomipramine, Desipramine

- Depression: 13 studies, > 300 subjects: none were superior to placebo (50 – 60 % placebo response rates)
- Separation Anxiety: 1 positive RCT, 3 negative: high placebo response rates
- ADHD: several positive RCT’s, although not as effective as stimulants
- Enuresis: several positive RCT’s for Imipramine
- OCD: 3 positive RCT’s for Clomipramine, 1 RCT found Clomipramine helpful for repetitive behaviors in autism
 - ⇒ Best Indications: Imipramine for enuresis, Clomipramine for OCD. Not indicated for Depression/Anxiety

Selective Serotonin Re-Uptake Inhibitors

- Depression: Fluoxetine
 - Emslie et al., 1997: Fluoxetine (n = 96)
 - Moderate to severe depression,
 - 58% vs 33% placebo response.
 - Emslie et al., 2002: Fluoxetine (n = 219),
 - Significant improvement, but 53% placebo response rate
 - Simeon et al., 1990. Fluoxetine (n = 40 adolescents)
 - No difference, both groups had ~ 66% response rate
- Fluoxetine FDA approved for Depression in Youth (the only medication approved for depression in kids)

Selective Serotonin Re-Uptake Inhibitors: *other indications*

- Anxiety
 - RUPP Anxiety Study 2001
 - Multisite 8 week Trial of Fluvoxamine
 - 128 youth with separation anxiety, social phobia and/or generalized anxiety disorder
- OCD
 - 4 Positive RCT's, including two multisite trials
 - Fluvoxamine, Sertraline and Fluoxetine studied
 - All FDA approved for OCD in youth

FDA Black Box Warning (10/31/04): Suicidality in Children and Adolescents

Antidepressants increase the risk of suicidal thinking and behavior...in children...with major depressive disorder and other psychiatric disorders. Anyone considering the use of (Drug Name) or any other antidepressant ...must balance this risk with the clinical need. Families ...should be advised of the need for close observation and communication with the prescriber. (Drug Name) is not approved for use in pediatric patients except for (any approved use)...

Pooled analysis of short-term placebo controlled trials...have revealed a greater risk of adverse events representing suicidal thinking or behavior...during the first few months of treatment...The average risk of such events was 4%, twice the placebo risk. No suicides occurred in these trials.

Mood Stabilizers

- Lithium
 - Two Small Positive RCTs for “Manic-like Symptoms”).
 - One RCT (Geller et al., 1998) found lithium improved bipolar mood symptoms and substance abuse
 - Two positive, one negative RCTs for Disruptive Behavior/Aggression
- Lithium FDA approved for Bipolar (ages 12 years and older)

Mood Stabilizers

- Valproate (Depakote_)
 - Decreased Explosive/Aggressive Behaviors (Donovan et al., 2000).
- Carbamazepine (Tegretol)
 - Mixed finding for disruptive/explosive behaviors
 - Meta analysis suggested some benefit for ADHD (Silva et al., 1996)
- ? every other anticonvulsant...including *Trileptal*, *Lamictal*, *Topomax*, *Neurontin*, *Gabapril*
 - No available RCT research yet

Antipsychotic Agents

- Schizophrenia
 - Two Small RCT's with haloperidol, loxapine
 - Clozapine superior to Haloperidol (Kumra et al., 1996)
 - On Clozapine (n = 21), 5 had neutropenia and 2 had seizures
 - TEOSS
 - Ongoing NIH Multisite RCT comparing risperidone, olanzapine and molindone
- Conduct Disorder
 - Positive trials for risperidone, haloperidol and molindone
- ADHD
 - Older trials of haloperidol, thioridazine and chlorpromazine
 - Generally not recommended for ADHD
- Autism and Mental Retardation: some decrease in stereotypies, disruptiveness, self-injurious behaviors

Pediatric Psychopharmacology: Summary

- Substantial Empirical Evidence Currently Supports
 - Stimulants for ADHD
 - SSRI's for OCD
- Well Designed Trials support
 - Risperidone for aggression and self-injurious behaviors in autism
 - Fluvoxamine for Childhood Anxiety Disorders
 - Fluoxetine for Moderate – Severe Major Depression

Psychotherapeutic Interventions

- Existing Evidence Suggests Traditional Therapies Most Often Used are Not Effective
 - Four Meta-Analytic Studies of Psychotherapy Research
 - > 300 studies, subjects 2 – 18 years of age
 - Medium to Large Effect Sizes in Comparison to No Treatment or Active Controls
 - Behavioral Therapies Generally Superior
- ⇒ Effective Therapies Available, But Generally Not Used in Clinical Settings

Cognitive-Behavioral Therapy

- Depression
 - At least 10 Positive RCTs for Depression in Children and Adolescents
 - Comparison arms included wait list controls and nondirective supportive psychotherapy
 - Few Negative Trials may be due to kids with Mild Depression
- Anxiety
 - Individual and Family CBT approaches found useful for Separation Anxiety and Generalized Anxiety Disorders
 - Behavioral Strategies useful for Phobias
- OCD
 - One Positive Trial, well established efficacy in adults
- PTSD
 - Positive Trials, includes youth exposed to maltreatment

Other Behavioral Strategies

- Conduct/Disruptive Behavioral Disorders
 - Several Positive Studies using varying strategies, including:
 - Problem-Solving Training
 - Anger Management
 - Assertiveness Training
- ADHD
 - Inconsistent Findings with strategies designed to improve self control
 - Contingency Management and Behavioral Interventions helpful
 - Generally not as effective as stimulants.
 - Time Consuming, difficulty with compliance
 - Don't always generalize to other settings or beyond the treatment

Parenting Training Programs

- Oppositional/Conduct Disorder
 - Interventions Designed to enhance parenting effectiveness, decrease coercion and improve parent-child interactions, including
 - Behavioral Family Intervention (Patterson 1974)
 - Videotaped Modeling Parent Training (Webster-Stratton 1994)
- Parenting Interventions and Family Therapy also helpful for
 - Anxiety Disorders
 - Eating Disorders

Multisystemic Therapy

- Aggressive case management, Comprehensive Psychiatric services and Targeted Family Interventions used to maintain youth in their homes and community systems
- MST has better outcomes (including reduced substance abuse) and more cost-effective than
 - Hospitalization
 - Incarceration
- However, effects may dissipate over 12 - 16 months (Henggeler et al., 2003)

Psychotherapy In Children and Adolescents: Summary

- Best Evidence for
 - CBT for Depression, Anxiety
 - CBT/Behavioral Strategies for Conduct Problems
 - Parent Training for Conduct Problems
 - MST for Conduct Problems
- Despite the availability of these Interventions
 - Most Clinicians Not Trained to Use Them
 - Most Psychotherapy done in Community Settings is supportive in nature, and may not be effective

Resilience

- What protects some kids?
 - temperament (arousal patterns/mood template)
 - cognitive profile
 - birth order
 - specific ties inside or outside the “family”
 - locus of control, well played age-specific defenses
 - finding someone at the right time
 - luck at avoiding the poorly timed risk (the beer, the peer insult, the shaming moment etc)
 - what seems like resilience now may correlate with problems later...and vice versa

All “psychologic” interventions are physiologic.

Examples:

- sleep hygiene
- activities change cortisol/testosterone levels
- fresh air and romping around
- diet
- meal milieu
- the phone call from grandma
- one song versus another
- its all biofeedback

All medication issues are psychologic...

- What are the thoughts that accompanied the swallowing of the pill?
- What do the *target* symptoms mean to the parents? The kid? Peers? The teacher?
- Media images?
- Informed consent and informed collaboration for even second graders...

You’re the doctor...

1. Build alliance (get alongside) (consult with team...)
2. Ask “What is right ?” and “What are you worried about?”
3. Look at the matrix... then at Dx... then the Rx
4. Assess risk management skills (motivational techniques)
5. Enhance internal/external surveillance/security
6. Individual/family psychotherapy (examples)
 - narrative
 - cognitive behavioral
7. Specialty groups (examples)
 1. dialectical behavioral therapy (DBT)
 2. adventure based therapy
8. With full alliance: treat cautiously with medications
9. Wraparound supports