Case Formulation in Children and Youth
Attending to Strength as well as Difficulty
Katharina Manassis, MD, FRCPC; Professor Emerita, University of Toronto
Disclosures

- Guilford Publishing
- Barron's Educational Publishing
- Routledge Publishing

- In case I refer to SSRIs at any point, please note that their use in children is off-label
Learning Objectives

- Understanding the complementary roles of diagnosis and case formulation in the assessment of children and youth;
- Challenging ourselves to integrate strengths, difficulties, and the developmental context in the formulation of children and youth;
- Appreciate the role of the case formulation in feedback to families, treatment planning, and training in child & adolescent psychiatry.
More than a Diagnosis

- Laura: 15 year old seen after overdose prompted by her only close friend moving away & being caught stealing money from parents
- Parents describe her as “a pathological liar who fools professionals” and is a “she-devil” when they try to set limits
- Rejected previous medication & psychotherapy “Just made her more mouthy” according to parents
- Soft-spoken girl with hair dyed jet black, black lipstick, and a nose ring; blunted affect, predominantly downcast, vegetative features of depression
- Laura describes herself as “I’m my parents’ disappointment.”
- IEP for learning disability and possible ADHD, but failing at school this term & told to discuss options with Special Ed. Counselor, but says “Why bother. She wouldn’t listen anyways.”
More than a Diagnosis (cont’d)

- Mom is exasperated “We give our children everything. Do you think she’s every said ‘thank you?’” and goes on about her “manipulative” child, but weeps at the end of the interview “Do you really think we could lose her?”
- Mom has history of PTSD
- Birth was difficult (?hypoxia), Laura “refused to breastfeed,” and has been “miserable since birth” to the point where it’s a family joke
- Reading delay and disorganized, ?ADHD, “scraped through” school
- Unruly behavior and withdrawal from family activities only noted for about 6 months though
- Dad nods and validates Mom’s critical statements about Laura
- Despite this, Laura continues to attend school, has maintained a part-time job, and participates on the swim team; has online friends, all depressive; curious about my CBT materials & drawings of brain cells
Rationale for Case Formulation

- “A set of hypotheses that offers a psychologically coherent model for the patient's problems and suggests the most appropriate mode of intervention.” (Eells, 1997)—implies it is dynamic & testable
- Challenges of understanding and treating comorbid presentations, and the recognition in DSM-5 that diagnostic categories may not always be a perfect fit;
- Offers a systematic approach to treatment failure
- Advances in developmental science (e.g., epigenetics) allow us to better understand the interaction of various constitutional and environmental factors than in the past
- Families increasingly research mental health information, and come wanting more than symptom-reduction: child functioning & well-being are important to patients/parents too
How it works

- Possible risk & protective factors are elicited from the history and mental status, with emphasis on context and development
- Factors are plotted on a grid by type (physical, psychological, social, spiritual/cultural) and timing (remote past or predisposing, recent past or precipitating, current or perpetuating); recognizing there is some overlap
- Protective factors which include strengths in the child and helpful supports are considered in each quadrant (as are risk factors) to ensure they are not neglected in the formulation
- Possible relationships between factors are sketched in with arrows
- The factors and their possible relationships are connected in a narrative, hypothetical account of the child’s strengths and difficulties (i.e., the case formulation)
- New information, response to intervention, and development may all require revision of the case formulation over time
Contextual/Developmental Factors

- Temperament
- Medical History
- Family History
- Developmental Hx
- Recent or current stressful events
- Family/Other Supports
- Child Strengths/ Coping Abilities
The Basic Grid

<table>
<thead>
<tr>
<th>Factors: Time</th>
<th>Biological</th>
<th>Psychological</th>
<th>Social</th>
<th>Spiritual/Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote past</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recent past</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Biological Aspects

- Constitutional: genetics, difficult temperament, pre/perinatal, developmental
- Talents & aptitudes, appearance, gender, easygoing temperament
- Direct brain effects of medical illness, e.g., thyroid & mood/anxiety, concussion/head injury effects on learning & emotions
- Indirect effects: the experience of illness & its treatment, especially if chronic or unpredictable
- Psychosomatic symptoms—suspect with onset in relation to stress, unusual presentations, unusual responses to treatment, absence during sleep
- Interactions with psychological, social, and spiritual/cultural factors, e.g., parental/school/peer/community reactions & resources re: child with developmental delay
Psychological Aspects

- Cognitive development—remember Piaget’s challenges
- Psychological development—remember Erikson’s challenges
- Coping style (or ‘defense mechanisms’, depending on your theory)
- Interactions with biology, social context, spirituality
- Why is Bowlby’s parent-child attachment so special?—not just the basis for “basic trust”, but also a template for relationships, and often coping style;
- Insecure attachment does not always predict psychopathology, but secure attachment is a significant protective factor
Social Aspects

- The family matters throughout development, but is crucial in the early years (when children have few other social influences)
- Circular interactions, parenting style, marital relationship, connection to community, closeness/distance, communication style, flexibility vs. routines can all be either risk or protective factors
- Same is true for school (great teachers vs. those who shame/dislike child) & peers (friends vs. bullies)
- Community ties are usually positive, but can pose challenges if community expectations differ from those of the predominant culture
- Social advantage & disadvantage is a huge factor in mental health
- Don’t forget: helping professionals are another ‘social aspect’!
Spiritual/Cultural Aspects

- We neglect to talk about this “unscientific” stuff at our peril
- Respectful curiosity is a good attitude, when unfamiliar with the family’s spiritual or cultural interpretations of illness & expectations of treatment
- It is worth being familiar with complementary treatments & culture-specific syndromes common in one’s community
- Spiritually based coping can enhance or detract from treatment, depending on its nature
- Spiritual/cultural background can influence expression of symptoms in biological illness (e.g., OCD), and interact with cognitive or psychological developmental challenges (e.g., identity formation in teens)
The “Jigsaw Puzzle” that Synthesizes the Information
Example 1: A Preschooler

- Max is the second of two closely spaced children in a dual-career family
- Parents both shy, somewhat isolated from community but good relationship
- Max seems easygoing, “content to watch life from the sidelines”, and seems to have a nice, secure attachment with mom
- Speech is delayed, and waitlists are long so private therapy is sought
- Max is very sensitive to noise and poorly coordinated; waitlists for OT are long so private therapy is sought
- At daycare, Max avoids peers and has tantrums with transitions
- Daycare threatens suspension unless family seeks help for him
- Waitlists are long so private psychologist seen: ‘mild global delay’ and suggests parenting course; no follow-up
Family strain: mother is struggling to keep her job because of all the therapy appointments with Max; older sibling resents time she spends with him fueling sibling rivalry; father is focused on paying all those bills

One day, Max fights his mother re: the bath (sensitive to water) and is injured; Daycare sees a mark on his back next morning and calls CAS

CAS investigates, concludes it is an “isolated incident” and closes file, no follow-up

Parents seek one more assessment from an autism expert, and finally at age 5 Max is diagnosed with Autism Spectrum Disorder

With this diagnosis, he becomes eligible for autism-specific intervention (ABA) and his family can get disability tax benefits to reduce $ strain
# Formulating Max

<table>
<thead>
<tr>
<th>Factors: Time</th>
<th>Biological</th>
<th>Psychological</th>
<th>Social</th>
<th>Spiritual/ Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote past</td>
<td>Autistic traits; Speech delay; Sensory issues; Easy temp. (p)</td>
<td>Secure (p); Overstimulated; Resists change</td>
<td>Family stress; Sibling rivalry; Psych. Minded parents (p)</td>
<td>Isolation from community supports</td>
</tr>
<tr>
<td>Recent past</td>
<td>O.T. (p); Speech therapy (p)</td>
<td>Defiant with transitions; Avoids peers</td>
<td>Day care wants to suspend; Professionals don't follow up</td>
<td>Long Wait Lists; Parents pay for private services ($ strain)</td>
</tr>
<tr>
<td>Current</td>
<td>Autism-specific intervention provided (p)</td>
<td>Less family stress (p); Behavior improves with intervention</td>
<td>Abusive event; CAS called; Further assessment</td>
<td>Financial aid once he is diagnosed (p)</td>
</tr>
</tbody>
</table>
Example 2: A School-Aged Child

- Abby is an active, healthy girl who suddenly develops seizures at age 10
- Mother has a history of anxiety, but the parent-child relationship is good
- Treating physician minimizes concerns about seizures (first few not witnessed by anyone other than mom); initial medication doesn't work
- Mom’s anxiety increases and she becomes very protective of Abby
- Effective anti-seizure medication causes cognitive slowing
- Abby becomes anxious about school failure as well as seizures
- Parent-child conflict about seizure management ensues (both meds and need for sleep), resulting in medical & relationship deterioration
Several sessions of psychoeducation & parent-child counseling ensued. Tutoring was organized to reduce academic strain & Abby’s anxiety. Church support gave mother a break from the situation sometimes. Praying with others also reduced maternal anxiety. As mother’s & daughter’s anxiety decreased, the parent-child relationship and the seizure management both improved.
# A School-Aged Child: Abby

<table>
<thead>
<tr>
<th>Factors: Time</th>
<th>Biological</th>
<th>Psychological</th>
<th>Social</th>
<th>Spiritual/Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote past</td>
<td>Seizures; Anti-seizure medication; Good sleep (p); Exercise (p)</td>
<td>Cognitive impairment; Anxiety re: seizures &amp; school failure</td>
<td>Parental anxiety; Caring family (p)</td>
<td></td>
</tr>
<tr>
<td>Recent past</td>
<td>Good seizure control (p)</td>
<td>Improved child-parent relationship (p)</td>
<td>M.D. minimizes; Overprotection; Academic problems; Family conflict</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
<td>Psychoeducation (p); Tutor (p); Adherence to medication (p)</td>
<td>Church support (p); Religious coping (p)</td>
</tr>
</tbody>
</table>
**Example 3: Re-examining Laura**

<table>
<thead>
<tr>
<th>Factors: Time</th>
<th>Biological</th>
<th>Psychological</th>
<th>Social</th>
<th>Spiritual/Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote past</td>
<td>Perinatal probs.; L.D.; ?ADHD; Difficult temperament</td>
<td>Probable insecure attachment</td>
<td>Maternal PTSD; Stable parental marriage (p); Social isolation of family</td>
<td></td>
</tr>
<tr>
<td>Recent past</td>
<td>I.E.P; (p); Special Ed. Counselor (p)</td>
<td>Low self-esteem; Capacity for friendship (p); Loss of friend</td>
<td>Academic failure; Parental help-seeking (p)</td>
<td></td>
</tr>
<tr>
<td>Current</td>
<td>Attends school (p); Swims (p); Job(p); Curiosity re: mental health (p)</td>
<td>Depression; Alienating parents further with behavior; Overdose</td>
<td>Lack of parent support; Uncertainty re: behavior management</td>
<td>Online “culture” of depressive teens (p)</td>
</tr>
</tbody>
</table>
Laura (cont’d)

- Reliance on peers is normative, to a degree, in adolescence but the extremes often relate to an unhappy family environment.
- Untreated school problems in grade school often get worse with the demands of high school.
- Family circles: depressed, irritable teens often alienate their parents, so parents focus on behavior rather than mood, leaving the teen feeling unsupported and even more hopeless/depressed.
- Will Laura get a happy ending?
Challenge: Developmental Context

- If a child falls further and further behind peers, this does not necessarily mean treatment is failing or the child/family are not trying (slower trajectories result in widening gaps)
- Being ahead in one area (e.g., language) doesn’t imply greater overall maturity
- Many families expect preschoolers to delay gratification (more common at school age), school-aged children to make inferences about their own and others’ behavior (requires formal operations which few develop before teens), teenagers to show good social judgment (not common until age 25);
- Setting the bar too low can be problematic in some cases as well
- There are normative fears by age, but the key issue is effect on functioning
- There are many developmental milestones, but...
Plan how to present feedback to the family, and who needs to hear what version (e.g., brief & simple for a small child, usually after discussing with parents & getting their input; similar or same version for parents & teens)

Emphasize the points that have the most evidence and the clearest links to treatment; when in doubt just state the facts (esp. when writing)

Avoid psychological/psychiatric jargon

Talk about the multifactorial nature of the problem to reduce blaming

Including strengths increases optimism, and often suggests strength-based interventions (e.g., a sport for an athletic but currently depressed teen)

Elicit child & family’s reactions to both formulation and treatment plan, including any omissions/disagreements, and negotiate modifications if needed

Ask who needs a copy of the report, and any exclusions (e.g. if report going to school, details of family history may be too sensitive)
Challenge: Need for Revision

- Treatment plan is usually based on diagnosis, ameliorating risk factors, and building on protective factors.
- Doing it all at once may not be feasible, so prioritize (e.g., by safety, evidence-based, or factors that will interfere with evidence-based).
- Revision may be needed due to new information, developmental changes, environmental changes, or unexpected response to intervention (e.g., families dysfunction sometimes disappears when the child’s doing better).
- Doing a baseline of key symptoms/problems is helpful to determine if treatment is “working” or not.
- Don’t be afraid to consult colleagues!
Challenge: Teaching Points

- Assessment that includes multiple informants
- Is the child abnormal, or are the developmental expectations?
- “An ecological, systems-based understanding of the child’s presentation” (Winters, Hanson, & Stoyanova, 2007)
- Synthesizing the information in a way that is useful and amenable to testing, and not overly dependent on one developmental theory
- Treatment planning: what risk/protective factors ought to be addressed sooner vs. later?
- Sensitive communication with families & youth
- Openness to Revision
- Watching for trainer/trainee biases
Examples of Teaching Challenges

- “Brian (age 4) has explosive outbursts when he is asked to share toys with his sister. Could this be Dysphoric Mood Dysregulation Disorder?” (Not knowing what’s developmentally normal)
- “I think his OCD stems from his mother’s obsessive house-cleaning, just like mine did.” (Trainee bias)
- “I’d rather stick to the DSM than formulate. It’s less parent-blaming.” (Misunderstanding the goals of case formulation)
- “The parents seemed upset with our formulation. Do you think they misunderstood?” (Struggles with sensitive communication, including eliciting feedback)
- “The parents are doing the right things behaviorally, but he’s still not going to school. I guess it had nothing to do with family dynamics.” (Not being open to a revised understanding of parent-child interactions)
Conclusions

- Case formulation is an informative aspect of assessment that complements diagnostic information.
- Case formulation can identify strengths as well as vulnerabilities.
- Treatment based on addressing all vulnerabilities and building on strengths is often more comprehensive than treatment focused exclusively on symptom reduction.
- Treatment informed by case formulation may therefore enhance evidence-based practice.
- Attending to developmental context, sensitive communication of findings, revision, and teaching of case formulation are common challenges.
Thank you for your Attention!

Questions?