CASE FORMULATION AND INTEGRATION OF INFORMATION IN CHILD AND ADOLESCENT MENTAL HEALTH

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Session at the Department of Child Development, Duhok, Iraq
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Being able to formulate a case is one of the key skills for clinicians working in child and adolescent mental health, but it is not an easy skill to master. Case formulation involves turning a patient's narrative and all the information derived from examinations, interviews with parents and teachers, and medical and school reports into a coherent and not necessarily lengthy story that will help to develop a treatment plan (see Chapter A.11). The formulation is a distillation of a child's and family's complicated, nuanced experiences into a manageable, meaningful synopsis (Winters et al, 2007), but a good formulation is more than just a summary: it provides information that may not be obvious in the isolated components leading up to it.

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THE SHAPE OF A FORMULATION

A formulation has to convey relevant signs and symptoms as well as pertinent negatives (i.e., key absent symptoms) ; provide meaningful, explanatory contexts for these signs and symptoms, including familial, social, educational, and cultural contexts; justify diagnoses (or no diagnosis, if warranted); and describe treatment options based on the diagnostic considerations.

The core components informing a diagnostic formulation tend to follow a standard trajectory with common signposts to guide the reader: referral source, identifying information, history of present illness, significant past psychiatric and medical histories, psychosocial contexts, mental status, diagnostic considerations, and treatment planning (Table A.10.1). The consistency in a formulation's architecture permits clinicians to follow a familiar route while attuned to important details and nuances.

Whether in psychoanalytic case studies or in brief presentations on ward rounds, and across systems and countries, the overall shape of the formulation remains the same. Within this broad shape, there are two common models that can help organize the conceptual backbone of the formulation. These are the *biopsychosocial formulation* and the *Four Ps*.

THE BIOPSYCHOSOCIAL MODEL

As the biological sciences became increasingly sophisticated and dominant in the twentieth century, concerns were raised about the value of non-biological factors in the etiology, presentation, and treatment of diseases and disorders. In the face of these changes, Meyer (1948) promoted the *psychobiological* approach and Engel subsequently developed, named, and advocated for the *biopsychosocial* model, describing it as a "way of thinking that enables the physician to act rationally in areas now excluded from a rational approach" (Engel, 1980). Over the past three decades, the biopsychosocial model has become the most common model for formulating a case in mental health circles and has been widely adopted throughout medicine.

The fundamental goal of the model is to prevent reductionism, particularly biological reductionism, by ensuring that psychological and social factors are not excluded (see Table A.10.2). The biopsychosocial model may appear to be a neutral mediator between the three domains but, quite specifically, it is not neutral: it is intended to oppose biomedical, psychological and social reductionism. Regardless

Reductionism

"A line of thought which holds that a complex system is nothing but the sum of its parts and that an account of it can be reduced to accounts of individual constituents" (http://en.wikipedia.org/wiki/Reductionism).

In psychology, reductionism usually refers to theories or explanations that over-simplify behaviour or cognitive processes often by excluding different perspectives, and, in doing so, neglect to explain the complexities of the mind. An example of reductionism would be to attribute behaviours exclusively to biological processes while ignoring family and social influences, or vice versa.

Table A.10.1. Core components informing a diagnostic formulation

COMPONENT	DETAILS CAN INCLUDE:
Sources of information	Patient, collateral information, medical records
Chief complaint	What brought the patient in
History of present illness	Symptoms, course, severity, triggering events, pertinent negatives
Past psychiatric history	Previous evaluations, therapies, hospitalizations, medications and treatments; history of aggression or harm towards self or others; substance abuse history
Past medical history	Illnesses, hospitalizations, surgeries, and medications including folk and alternative medicine remedies, etc.
Family psychiatric and medical history	Pertinent positives and negatives in the family's psychiatric and medical history, especially substance abuse, suicide, and cardiac history (e.g., sudden deaths)
Social history	Family constellation, peer relations, interactions with the law and-social services, and key events such as immigration
Education history	Schools, grades, report cards, special or regular education, changes in schools, suspensions
Developmental history	Mother's pregnancy and labor, delivery, milestones during infancy; stages of motor, cognitive, social and behavioral development.
Psychological testing	IQ, tests of adaptive functioning, speech and language evaluations.
Mental status exam	
Assessment	Diagnoses, hypotheses of causality.
Plan	Treatment goals and options, other persons or agencies to contact.

of anatomical lesions, clear psychological or obvious social etiologies, this model insists that all three domains be accounted for. By doing so, it has been a powerful and successful model for physicians in all fields of medicine.

The *biological* domain circumscribes neuropsychiatric, genetic and physiological issues, focusing on, but not limited to, the functional operations of the brain and what might be directly affecting it. The *psychological* dimension includes an evaluation of the child's psychological make-up, including strengths and vulnerabilities, and offers the opportunity to include psychodynamic principles like defense structures, consciously and unconsciously driven patterns of behavior, responses to trauma and conflict, transferences and counter-transferences. The *social* dimension situates the child in their communities, exploring relationships

Table A.10.2: The Components of the biopsychosocial model

BIOLOGICAL	PSYCHOLOGICAL	SOCIAL
• Family history	• Emotional development	• Family constellation
• Genetics	• Personality structure	• Peer relationships
• Physical development	• Self-esteem	• School
• Constitution	• Insight	• Neighborhood
• Intelligence	• Defenses	• Ethnic influences
• Temperament	• Patterns of behavior	• Socioeconomic issues
• Medical comorbidities	• Patterns of cognition	• Culture(s)
	• Responses to stressors	• Religion(s)
	• Coping strategies	

Defense mechanisms

Coping styles or defense mechanisms are "mechanisms that mediate the individual's reaction to emotional conflicts and external stressors" (American Psychiatric Association, 2000 p821). Dysfunctional defense mechanisms tend to allow people to avoid reality or result in worsening problems, while functional coping skills help us deal with reality.

Defense mechanisms are part of everyday life. One is usually not aware of utilizing them. Defenses are:

- A major means of managing conflict and affect.
- Relatively unconscious
- Discrete from one another
- Reversible
- Adaptive as well as pathological (Vailliant, 2012).

DSM-IV TR in Appendix B (American Psychiatric Association, 2000, pp. 811-813) describes a long list of defence mechanisms. The more common, from immature to mature, include:

- **Denial**, when individuals refuse to accept the truth or face reality (on hearing of the death of a pet, a child says "no, my dog is still alive.").
- **Repression** involves 'forgetting' something bad or unpleasant (e.g., forgetting a meeting with someone one does not like).
- In the case of **regression** we revert to child-like behaviour usually as a response to stress (e.g., an adult cuddling up with an old toy when feeling sick with the 'flu)
- In **displacement** one transfers one's original feelings (usually anger) away from the object of one's anger to a harmless victim (e.g., arguing with one's partner after having a conflict at work; 'kicking the cat').
- **Projection** leads us to project one's feelings or insecurities unto others (e.g., 'what are you looking at; don't you like what I am wearing?' when one is concerned about what one is wearing).
- **Reaction formation** is when individuals express the opposite of their inner feelings in their behavior (e.g., bringing your boss a coffee instead of saying you're really angry at him/her)
- In **rationalization** individuals deal with conflicting or unpleasant stressors by explaining them away (e.g., car accident due to speeding explained away as a statistical fact).
- **Sublimation** occurs when emotional conflict or stressors are dealt with by channeling maladaptive impulses into productive activities (e.g., a person who was neglected during their childhood channelling these feelings in helping other people).

To learn more about defence mechanisms in children you may read the article by Carol Kurtz Walsh.

with family and friends, as well as larger collective cultural organizations like schools, religion, socioeconomic class and ethnicity.

Advocates for the biopsychosocial model argue convincingly that it is needed because a "broad approach [is] essential to avoid premature closure of our efforts to understand the patient's needs, tunnel vision or an overly narrow approach to treatment" (Jellinek & McDermott, 2004). Furthermore, it is particularly useful for psychiatrists, who are in a unique position within medicine to address the biological, psychological and social dimensions of the patient (Gabbard & Kay, 2001), and therefore are responsible for being attuned to each.

Nevertheless, critics of the model, also convincingly, note that the biopsychosocial model is "silent as to how to understand those aspects under different conditions and in different circumstances" (Ghaemi, 2003, 2009). While insisting that medical materialism or psychological and social dogmatism cannot suffice, this model does not guide the clinician how to weigh the relative contributions of each in any given patient. If a child is being bullied and has an aunt who is depressed, and has always been noted to be a worrier, the biopsychosocial model would provide slots for where each of these facts would fit, but no guidance on what needs to be addressed first, what is most important, what treatment should ensue, etc.

An additional flaw in this regard is that because the model is agnostic about the roles of biology, psychology and society, those who prefer one particular realm can devote their attention to it while paying lip service to the others in a few short sentences (Jellinek & McDermott, 2004). In particular, the tailing 'social' domain is often the least explored (Grunebaum, 2003). Virchow, the German physician, said that "medicine is a social science" and although psychiatry has a history of collaborating with sociology (Bloom, 2005), the academic and clinical intersections between mental health and other social sciences remain under-explored. This is especially true in regards to children, many of whom present to child and adolescent mental health workers due to fundamentally social concerns, such as impulsivity and hyperactivity in the classroom, conflict with parents, truancy and school refusal, or other externalizing disorders (Centers for Disease Control and Prevention, 2005), and where the 'social' component is nevertheless given short shrift.

The most worrying critique of the biopsychosocial model is that it does not blend or integrate the three dimensions as much as loosely knit them together through proximity in the formulation. Thus, how the social, biologic and psychological are integrated is left unanswered (McLaren, 1998).

The biopsychosocial model has been a step towards re-thinking reductionism and an opportunity for generating hypotheses about multiply-determined etiologies, which may lead to improved capacity for further synthesis and understanding (Freedman, 1995). It is, nevertheless, not sufficient and barely good-enough.

Medical materialism, psychological and social dogmatism

Medical materialism is the belief that a physiological, biomedical explanation suffices to explain abnormal or atypical behaviors, and therefore is a form of reductionism. The term was used by William James who argued against explaining diverse or atypical psychic experiences as mental illness.

Psychological or social dogmatism is the belief that psychology or the social environment is, respectively, uniquely causal in abnormal or atypical behaviors, as when, for example, disruptive behavior in children is ascribed only to a chaotic social environment.

THE FOUR Ps

The Four Ps model is more sophisticated than the biopsychosocial model in that it provides a framework imposing a chronology and an etiology on the

Table A.10.3. Examples of where the biopsychosocial model meets the Four Ps model

THE 'P' CHARACTERISTIC AND TRIGGER QUESTION	BIOLOGICAL	PSYCHOLOGICAL	SOCIAL
Predisposing *Why me?*	Genetic loading	Immature defensive structure	Poverty and adversity
Precipitating *Why now?*	Iatrogenic reaction	Recent loss	School stressors
Perpetuating *Why does it continue?*	Poor response to medication	No support at school	Unable to attend therapy sessions because of parents' work schedule
Protective *What can I rely on?*	Family history of treatment response	Insightful	Community and faith as sources of support

formulation and that suggests how and where interventions may take place. This model organizes the patient's presentation into *Predisposing*, *Precipitating*, *Perpetuating* and *Protective* factors (Table A.10.3):

- *Predisposing* factors are the constellation of features that render the child vulnerable to the presenting symptoms such as family history, genetics, medical and psychiatric history, and chronic social stressors
- *Precipitating* factors identify current symptoms, diagnostic reasoning about the role of inciting events, and concurrent illness
- *Perpetuating* factors are those that make the condition endure, such as the severity of the condition, compliance issues, and unresolved predisposing and precipitating factors.
- The fourth, *protective*, describes a patient's strengths, resilience and supports. Although other models can include strengths, this model explicitly foregrounds it.

The Four Ps can be easily used in conjunction with other models. For example, it can be blended with the biopsychosocial model (see Table A.10.3). As a framework, it can also be used to organize a psychodynamic formulation, beginning with *predisposing* vulnerabilities, personality structure, and history; *precipitating* trauma or life events; *perpetuating* maladaptive behaviors and resistances; and *protective* facets of the identity.

The Four Ps can be used with the Collaborative Problem Solving (CPS) model (Greene & Ablon, 2005). The CPS model comprehensively assesses cognitive deficits around frustration tolerance, flexibility and problem-solving, and it exemplifies a collaborative approach to the formulation, with caregivers coming together to understand the child and then working with the child to prevent

dangerous or aggressive behaviors. As the child is also involved in formulating the plan, the Four Ps provides a concrete way of organizing the different factors that lead to problematic behaviors in a manner comprehensible to staff and patients alike.

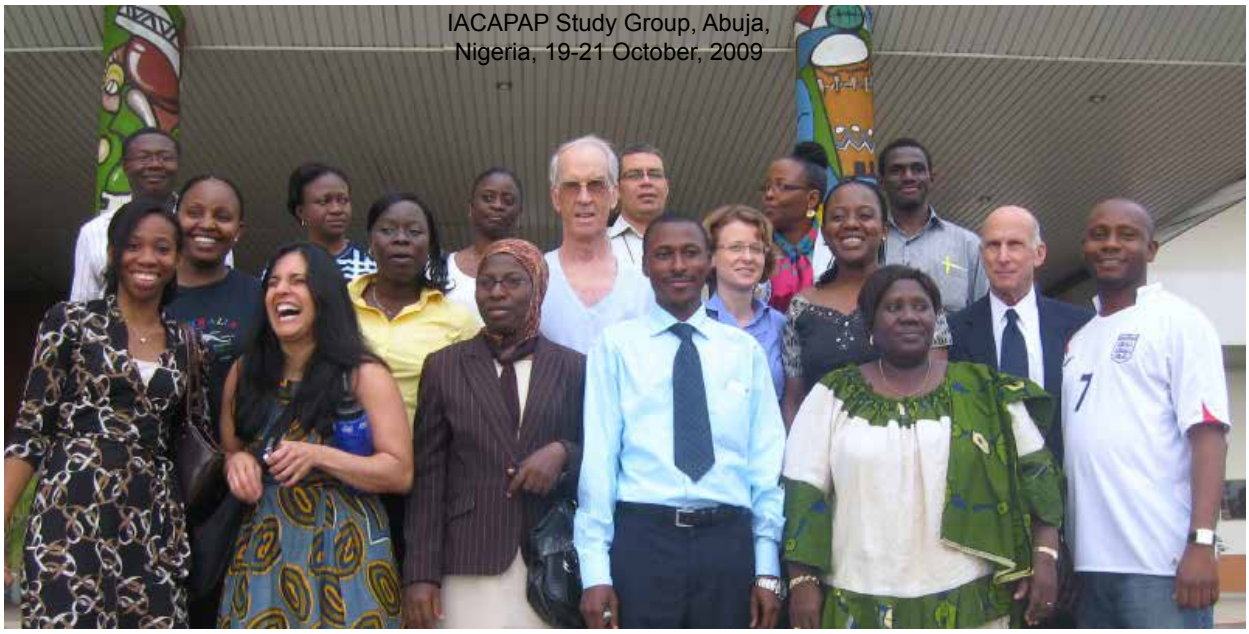
The CPS approach expands on the precipitating and perpetuating factors, especially the ones pertaining to the child's learning (including his or her social learning). It then allows the staff to formulate appropriate, testable and patient-specific interventions based on observed behaviors and analysis of triggers (precipitating events), continued stresses (perpetuating factors), and strengths that can be tapped into (protective factors). This combination of the Four Ps formulation and the CPS model may be particularly apt on inpatient units (Greene et al, 2006).

Similarly, Havinghurst and Downey (2009) propose a *Mindful Formulation*. After collecting information, the Mindful Formulation uses a "patterns" worksheet where the child's affective responses, behaviors, and cognitions are collected in four domains:

- Child functioning
- Parents'/carers'/siblings'/significant other's functioning
- Relationships with the child and among significant others; and
- Relationships with and among the community.

The goal is trying to discern patterns of strength as well as patterns of weakness and vulnerability and then to use these patterns to flesh out the Four Ps.

Biological, psychological and social elements can fall under each category. The limitations of the Four Ps model include the nonstandard format (one does not begin a formulation with "predisposing factors") and an uneasy overlap between categories. There is little consolidation of the many factors except as to how they affect the patient's symptomology, although a strength of the model is that it is nevertheless explicit about arranging potentially etiological factors.



IACAPAP Study Group, Abuja, Nigeria, 19-21 October, 2009

THE VARIETY OF FORMULATIONS

Tauber writes that in science "observations assume their meanings within a particular context, for facts are not just products of sensation or measurement, as the positivists averred, but rather they reside within a conceptual framework that places the fact into an intelligible picture of the world" (Tauber, 2005). The formulation is not a value-neutral format containing dispassionately-arranged facts. The choice as to which facts to include and which to reject and the subsequent ordering and presentation of the facts collude to produce a value-laden product. A formulation is thus a condensation of values, informed by the nature of the encounter between the clinician and the patient; practical goals; training and experience; and implicit and explicit ethics.

'The formulation is not a value-neutral format containing dispassionately-arranged facts.'

Location

The shape of a formulation may depend less on the patient's narrative and more on the location of the clinical encounter. As an example, on a crisis service, an excellent trainee with a longstanding interest in psychoanalysis was presenting thoughtful and rich formulations about children with a focus on developmental conflicts with family and peers; although these issues were far from irrelevant, they did not help the team decide what treatment options were required that day or what immediate services we wanted to offer the family. The trainee's formulations were, however, well suited to his long-term therapy cases. With education on how to revise the formulation for the clinical milieu, the trainee was able to provide thoughtful, psychodynamically-informed formulations in concert with other observations and information that resulted in our ability to make plans for the families right then and there.

A formulation needs to reflect the imperatives of the system in which the encounter takes place and therefore mirrors clinical priorities. A formulation may focus on the severity and acuity of a patient's symptoms and needs in a crisis service; it may develop a working-model of treatment trials and planning in an inpatient unit; it may narrate the gradual blossoming of relationships, defenses and cathexes (emotional investments) cultivated and analyzed in a psychodynamic treatment. What each clinical milieu values is reflected in how the child's assessment and treatment will be formulated.

'A formulation needs to reflect the imperatives of the system in which the encounter takes place and therefore mirrors clinical priorities.'

Treatment values

One of the goals of a formulation is to drive a treatment plan (including no treatment, if warranted), and therefore the shape of a formulation will be influenced by treatment options (see Chapter A.11). Depending upon the type of treatment, the clinician will select questions and areas of assessment to explore. A clinician's training, biases, and experiences will naturally influence how questions are asked and what is explored; one of the advantages of learning different types of formulation techniques and perspectives is that it allows the clinician to become aware of his or her own biases, but also allows them to be explicit about their perspective and why it leads to certain treatment options.

Click on the image to listen to "One Case, Two Formulations: Psychodynamic and CBT Perspectives" (35:17)

Etiological values

What causes mental health disorders, maladies, diseases, problems, issues? What factors conspire to make a child drop out of school? The biopsychosocial and Four Ps models create a great deal of space in which these questions can be answered, and yet they do not compel an answer. They do no prognostic work themselves. Some have suggested that we need to use models that are less flimsy and wishy-washy, and that we use models that confidently assert etiological claims (not with arrogant hubris, but based on what we know as clinicians and respect for what we have learned from our science and our history, and so on).

The Four Perspectives model

Attempting to provide an alternative to the biopsychosocial model is another model, the *Four Perspectives* (not to be confused with the Four Ps) (see Table A.10.4). The Four Perspectives model provides a means of distinguishing mental health conditions based not on the conglomerative biopsychosocial model, but on etiology and treatment options (McHugh & Slavney, 1998). The concept of pluralism, defined by Havens (2005) as a process of "refining methods, not mixing them" has deeply informed the Four Perspectives model.

The Four Perspectives each come with a treatment paradigm:

- *Disease*, the keystone of the biomedical perspective, is a clinical entity, a pathological condition with a specific etiology and with a likely prognosis. The treatment for disease involves prevention and cure, by interventions that directly or indirectly affect the pathological process and/or produce symptom relief (which may, of course, include psychological interventions)
- *Dimensions* are based on vulnerabilities due to a person's position within ranges of psychological domains (such as intellectual disability or temperament). They are addressed with guidance
- *Behaviors*, maladaptive or undesirable goal-directed activities, need to be ameliorated, stopped or interrupted, through social, psychological and/or medical means
- The fourth perspective is *the life story*, based in the reconstruction of narratives through talk therapy. Treatment is usually sought due to emotional states of distress and proceeds through interpretation.

Some of the participants in IACAPAP's Helmut Remschmidt Research Seminar
Beijing, February 21-26, 2010

McHugh (2005) points to the potential adverse effects of each intervention. As they note, all medications can be toxic; guidance can be paternalistic; stopping can be stigmatizing; and interpretations can be hostile. By making the assessment and acknowledgement of potential adverse effects a cornerstone of the formulation, mental health professionals can collaborate more fully with the patient and family in a transparent and compassionate way.

In a previous publication (Henderson & Martin, 2007), we added another category, *requirement*, to be included in the Four Perspectives formulation. The *requirement* is what is needed for the intervention. For a biomedical cure to be effective there must be an assessment of compliance or adherence to treatment. With guidance, there must be identification of developmental potential, which the guidance can develop. For example, in working with a patient with intellectual disability, intellectual, vocational and occupational strengths must be assessed. Changing behavior requires a will to change, whether this is intuitive, as in the case of a boy who wishes to stop smoking marijuana and has moved from pre-contemplation into contemplation, or cultivated through a system of positive and negative reinforcement. And for interpretations to be effective, the patient's insight needs to be appraised.

A formulation based on the Four Perspectives would take as its conceptual point of origin a conviction about the patient's presentation, which would remain adaptable within the overall formulation, and which would then guide the formulation towards specific interventions. One advantage of the Four Perspectives is that they make "explicit aspects of reasoning about patients that are often left implicit or vague"(McHugh & Slavney, 1998).

The pluralistic formulation would proceed as the mental health professional ascertains which categories, perspectives or dimensions best describe the child's

Table A.10.4 The Four Perspectives*

PERSPECTIVE	TREATMENT	PROBLEM/CRITIQUE	REQUIREMENT
Disease What a patient *has*	Cure	Medicines can be toxic	Compliance
Dimension What a patient *is*	Guide	Guidance can be paternalistic	Location of strength
Behavior What a patient *does*	Interrupt	Stopping can be stigmatizing	Will to change
Life Story What a patient *wants*	Re-script	Interpretations can be hostile	Insight

*adapted from McHugh and Slavney (1998)

condition; the formulation would then explain how the mental health professional engages in appropriate, directed treatment, having assessed the requirements and acknowledged the concerns.

The biological approach (the disease model) has a better fit with conditions like bipolar disorder, schizophrenia and Rett Syndrome than it does with grief. The behavioral approach, which targets known harmful behaviors, may be best for substance abuse (although, of course, medical interventions directed towards addiction as a disease can be countenanced as supplemental). The *life story model* is geared towards understanding and narrativizing stresses and so would be more helpful for bereavement after loss or stagnation in life's journey.

Stages of change model

Different people are in different states of readiness for change. Identifying where an individual lies in the process of change allows for a better matching of treatment interventions.

The widely used five stages of change are:

- **Precontemplation**, when the young person does not see the need to change
- **Contemplation**: the person acknowledges the need to change but is ambivalent about taking the steps to deal with it or too concerned about the negatives of changing
- **Preparation**: when individuals are aware of the benefits of changing and take small steps towards it
- **Action**: the young person is actually taking steps towards significant change
- **Maintenance**: the young person has achieved change and is able to successfully avoid a relapse

This model was initially developed for substance abuse treatment but is now widely used to describe situations in which behavioural change is sought.

Culture

The formulation can integrate the individual with his or her cultural context, without which it may not be possible to understand fully the patient. The cultural formulation itself has several core components:

- The cultural identity of the individual (including self-identified cultural affiliations, languages spoken, and levels of involvement with cultures of origin and host/dominant cultures)
- Cultural explanations of illness (such as local meanings, cultural explanations for symptoms, and idioms to describe illness)
- Cultural adaptations to the environment and stresses (such as specific stresses in the community as well as areas of support in the community, including possible sources of collaboration); and
- Cultural areas of convergence and divergence between the clinician and the individual (American Psychiatric Association, 1994; Pumariega et al, 2013).

Attending to this allows for culturally valid assessments on the part of the clinician, but can also be essential in formulating subsequent plans that are acceptable to the patient (Lewis-Fernández & Díaz, 2002). Culture is everywhere, and children are usually exploring it with vigor. Of all the cultures children participate in, few are more important than the culture of childhood itself. A good formulation will include the child's relationship to this rich culture, including the child's interactions with peers and participation in childhood rituals, and his or her engagement with television, video games, sports, movies and books.

THE USES OF A FORMULATION

A case formulation is hypothesis-generating and iterative, and can change over time depending upon further clinical encounters, new information and the clinician's evolving understanding of the child. So what purpose does a formulation serve?

A formulation is a mode of communication and a way in which the clinician can understand and explain the patient.

Before focusing on the pragmatics, let us remember that a formulation is a way in which the clinician can understand and explain the patient. As proposed by Jaspers, understanding and explaining may be distinct ways of knowing the patient (Jaspers, [1913]1997). The depth of our understanding of a patient's experience may not explain the etiology of a symptom in a way conducive to treatment, and likewise a model of behavior may not adequately impart the patient's experience of

that behavior. Nevertheless, formulating a case allows the clinician to balance his or her understanding of the patient and his or her explanations.

Understanding a patient requires an intersubjective appreciation of the patient's experiences, hopes and concerns, and is acquired through listening, talking and interacting with the patient (as well as his or her family and others occupying important roles in his or her world). Explanation of a patient's symptoms and conditions itself has two dimensions: the interpretative task, where psychological, sociological and neurobiological theories are used, ideally in an explicit and evidence-based manner, in order to locate the contributing factors; and the explanatory task, which connects these factors with the patient's experience. Understanding and explanation work in concert.

A formulation, first and foremost, is a mode of communication. The question of its utility then depends upon the audience: consultation letters, discharge summaries; pre-authorization of treatment for an insurance company; for legal purposes etc.

WRITING A CONSULTATION LETTER

Consultation letters are another area where the case formulation is essential. It is widely believed that poor communication between healthcare professionals is responsible for many problems. In one worrying study, the authors reviewed 150 assessment letters from psychiatrists at a clinic in Rottherham, UK, and discovered that 94% of them did not include a case formulation (Abbas et al, 2013).

What should a consultation letter look like? Keely et al (2002) provide a useful guide.

Information

- Explain the purpose of the consultation at the outset
- Explain the role the consultation letter will take (for example, what the letter will include, such as historical information, diagnosis, and recommendations for further treatment)
- Include an appropriate case formulation
- Include diagnostic rationale and clear plans for follow-up
- The letter is also a tool for education so may include references and explanations to educate the various potential audiences of the letter.

Pragmatics

- Know your audience: write the letter with an awareness of who will be reading it (potentially including multiple different professions and parents, lawyers, insurance companies, agencies)
- Remember that your audience may include your patient and his/her family
- Ensure that it will be comprehensible to all your audiences while including the information they need
- Make it clear and organized

Participants in the Donald J Cohen Fellowship program during IACAPAP's Beijing World Congress 2010.

- Readability (and, in the era of computers, scannability): clear paragraphs, bullet points
- Ensure that trainees get experience and feedback on letters.

What should you *not* include in a consultation letter?

Being able to write discreetly about sex, drugs, conflicts with family, and other topics is an important skill to develop, and this raises the broader issue that a formulation requires communication skills that are sensitive to ethical and clinical relationships. A formulation includes these *values* as well as the values of accuracy and veracity; it should convey clinical material in a way that is sensitive to patients, their confidentiality and their privacy; it should not include information that is irrelevant to the current problems.

In this era of Twitter and text messaging, letters should be brief and to the point. Professionals are unlikely to read a letter longer than one or two pages. For example, general practitioners/family physicians would expect in the letter: the psychiatrist's formulation including a provisional diagnosis; an explanation of the patient's condition including what the patient/family have been told; assessment of suicide risk, where appropriate; treatment recommended or provided; follow-up arrangements, if any; and prognosis, if possible. (Wright, 1997)

CHILDREN AND FORMULATIONS

The models for case formulation have typically been derived from adult psychiatry. Although child and adolescent psychiatry has offered much to adult psychiatry, and vice versa, the mantra that children are not simply 'little adults' is nowhere more true than in the mental health and experience of youngsters.

How do we specifically adapt formulations for children?

Jargon

The language of the formulations needs to be precise and relevant to the child's life. This means resisting reliance on jargon, with a cautious use of terminologies that might be derived and more epidemiologically justified in adult populations. Children are frequently referred for mental health evaluation, including from other mental health professionals, for "auditory hallucinations", not necessarily because they are having auditory hallucinations but because they may have answered "yes" to questions that are, for them, vague and strange, that possibly approximate their experience, or that are answered concretely ("do you hear voices?"). Although the referral may warrant expert evaluation, the subsequent formulation should resist using *auditory hallucination* unless that precise term is clinically warranted, and not, for example, when the child is lying in bed, trying to go to sleep, and spooked by vivid memories of a horror film watched the night before.

The chief complaint

This is usually a single line or a symptom, but with children who are brought in by adults, it would be worth considering assessing two chief complaints: the chief complaint of the adults and the chief complaint of the child (which, it is true, will often be "I don't know")

Explicitly including family and school as separate categories

Although this might also be good for adult patients (with a focus on employment rather than school), these realms should be explicitly and comprehensively evaluated in children, and thus may merit sections of their own, rather than subsections of 'social' in a formulation. Stressors in the family and school can reflect a child's symptoms, exacerbate them, or, indeed, be fundamentally etiological. In fact, there are no situations in which a child's presentation for services does not reflect difficulties in one or both of these realms, whether the child is reacting to stressors, posing challenges to these domains with his or her behavior, or where his or her symptoms are exacerbated by what he or she is experiencing at home or at school.

Development

Children deserve an assessment of development that is not cursory. Much of a child mental health professional's diagnosis and treatment planning is predicated on what is typical or atypical at that child's age and how the presenting symptoms will affect subsequent development.

Development is often put into its own section of the formulation, but this may run the risk of allowing a brief synopsis of broad developmental stages without integrating development specifically and thoughtfully into all aspects of the formulation. This can be challenging because, for example, often there is a gestalt sense of whether hyperactivity or moodiness are deemed excessive, and because sometimes fairly 'typical' behaviors coalesce to produce a constellation of symptoms that would be detrimental.

See the Appendix for an example of formulation focussing on different aspects and acording to different models.

Models of development

A formulation that is not book-length cannot run stage by stage through, for example, Freud, Erikson, and Piaget; the formulation requires making choices. In this regard, as well as others, children suffer from the frictions and misunderstandings of different mental health professions and theoretical orientations. Using or thinking through various paradigms does not necessarily imply allegiance and dogmatism. This is not to say that all models of development are equally right, but the capacity to invoke or countenance different models should not be based on professional competition. Although everybody changes over time, children are in a whirlwind of growth and maturation, accumulating language and skills, experimenting with their expanding world, gaining mastery over tasks while being introduced to more complicated ones on a daily basis. This process is not straightforward and may be better viewed as a punctuated evolution than as a smooth and even progression; the course charted by the developing child depends on biological factors, family constellation and social circumstances. Nevertheless, a basic appreciation of expected norms can situate the child and alert the clinician to delays and disorders. In light of this, a useful tool for the formulation can be an assessment of the child's tasks in terms of motor, cognitive and social development, based on models including Piaget's stages of cognitive development and Erikson's tasks. Expressing the child's development in these terms in the formulation will have additional longitudinal value, just as growth charts map a child's physical trajectory.

The individual focus of case formulations

Children can be the canaries in the coal mine. Profound family stressors may become manifest in the child's behavior, and knowing that these need to be addressed—and how to figure this into the treatment plan—will not only prevent the child from getting unnecessary treatment when better treatments could address the situation, it avoids collusion in a failure to address predisposing and precipitating symptoms.

CONCLUSION

The formulation is an exciting confluence of ideas, where the values of child and adolescent mental health professionals come together with the patient's experience to create a narrative about that patient leading to treatment. An iterative and adaptive format, the formulation can accommodate different theories and perspectives to explain what is happening to our patients while we strive better to understand them. Despite all these variables, the formulation need not be either intimidating or cumbersome. The science of the formulation is its hypothesis-generating format, modifiable with new information, in service of causal explanations. The art of the formulation is not instantaneously pinning down the right diagnosis, but rather providing a thoughtful, sympathetic portrait of a child in the world.

- Do you have questions?
- Comments?

Click here to go to the Textbook's Facebook page to share your views about the chapter with other readers, question the authors or editor and make comments.

PLEASE GO TO APPENDIX A.10.1 FOR SELF-DIRECTED LEARNING EXERCISES AND SELF-ASSESSMENT QUESTIONS

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Appendix A.10.1

EXERCISES

Read this case vignette and write:

1. A formulation following the biopsychosocial model focusing on risk for a clinically significant depressive disorder
2. A formulation following the Four Ps model focusing on suicidality
3. A letter to the referring professional outlining the result of your evaluation and your recommendations.

See model responses in the next pages.

A CASE, FORMULATED

A composite case is presented, followed by a biopsychosocial formulation focusing on risk factors for depression, and a Four Ps formulation focusing on suicidality.

A fourteen year old girl, Sara, comes to the clinic after trying to swallow a handful of lithium tablets during an argument with her father. She was stopped by her father and then threw the pills on the floor.

Her chief complaint when she meets you is that that she is depressed and angry. She says she was angry that her father wanted her to go back to her hometown to live with her mother. Her father had become increasingly frustrated that Sara was smoking so much marijuana and failing at school. Sara says that her depressed mood preceded coming to live with her father. She says she has had months of trouble falling asleep because she's ruminating on her day's failures, and then can't wake up because she's exhausted after a long night of tossing and turning. She says she can't concentrate in her new school, which is why she says she leaves school every day to smoke marijuana. She says it helps her focus and relax and is the one time she enjoys being her new friends. She misses being with her old friends. She says that she has no desire to die right now, but that when she gets really upset she thinks about wanting to be gone forever, particularly because her parents would be sorry and would miss her.

Her father adds that she has been irritable for about two months since joining him in the city and that she wasn't like this as a little girl. He says that it has been worsening recently as her school performance has worsened. He says that during arguments she has said with increasing vigor that she wishes she weren't alive. He took her to a doctor who prescribed lithium for mood lability, irritability and depressed symptoms. Neither Sara nor her father report that she has ever had any psychotic episodes or manic symptoms, although she has been anxious at times, just like her mother was. Her father says that he has no psychiatric history but her mother was "moody" and tried to kill herself when he first said he was leaving for the city.

Biopsychosocial formulation focused on risk for a clinically significant depressive disorder

Sara is a fourteen year old girl with symptoms of depression, including depressed mood and irritability, trouble sleeping, poor concentration, negative ruminations and a recent interrupted suicide attempt. Biological risks for a depressive disorder include a family history of mood lability; substance abuse, which may be exacerbating her depression or her performance in school; and lithium toxicity. Psychological factors include ongoing distress over her parents' separation, feeling trapped between them, and school failure. Social factors include decreased supervision now that she has moved to live with her father, distance from her old friends and family, and conflict with new friends at school.

A Four Ps formulation for suicidality

Sara is a fourteen year old girl with symptoms of depression and a recent suicide attempt. Predisposing factors for suicidality include her mother's history of suicide attempts; Sara's suicidal ideation, expressed as threats during arguments with her father; having less supervision and being in a new, isolating environment. Precipitating factors include the stresses of moving to a new city, being in a new school, and a fight with her father. Perpetuating factors include insufficient treatment and worsening depressive symptoms. Protective factors include strong social relationships prior to the move, which can be developed, and a willingness to start new treatments.

IACAPAP's Pacifica Study Group
Melbourne, 2013

Letter from the child psychiatrist to the referring family physician

January 20, 2014

Dear Dr NN,

Thank you for referring Sara, a 14 year old girl living with her father, for evaluation of her suicidality. I saw her on her own and together with her father on two occasions. I also spoke with one of her teachers.

Purpose of the consultation

Sara describes having been unhappy and cranky for some months, smoking marijuana daily and not doing well at school. Father confirmed these behaviours and said they were having increasing arguments because of his concern about her using marihuana and wanting her to stop. Following one of these arguments she tried to poison herself with lithium tablets (prescribed by another physician) in the presence of her father. She denied having a current plan to harms herself. This resulted in the referral. Sara was described by her teacher as finding it hard to settle in the new school, having few friends and drifting towards troublemakers.

Summary of the history

Sara is an only child. Parents divorced several years ago following considerable marital disharmony and after father deciding to come to live in the city. Sara used to spend the holidays with her father and requested to live with him two months ago. Relationship between Sara and her mother had been strained for some time. Her father says that he has no psychiatric history but her mother was 'moody' and tried to kill herself when he first said he was leaving for the city.

Summary of the family situation

Sara was born following a normal pregnancy and delivery. Milestones were average and she was described as a bright, happy and cooperative child. She was average at school and had a few friends. Menarche was at age 12. Her behaviours seemed to change at that point: she became moody, had frequent arguments with her mother and began to challenge limits.

Brief developmental history

Sara presented as well groomed, appropriately dressed young woman who looked older than her age. She was articulate and able to give a good history. However, there was obvious tension between her and her father. When seen on her own, Sara was articulate and able to give a good history. She described having been unhappy every

Summary of MSE

day for some time; she had lost interest in everyday activities and pastimes, had recurring thoughts that she may be better off dead, mainly after arguments with her father. Her school performance, concentration and motivation had deteriorated also. She was sleeping and eating (she attributed this to the marijuana use) more than usual. She denied and there was no evidence of hallucinations, delusions, obsessions or compulsions. She seemed of average intelligence but was not formally tested. Sara appeared to have some insight into her behaviour and prepared to attend treatment but was not motivated to stop using marijuana at this point ("it is the only thing I actually enjoy"). She scored in the mildly depressed range in a depression rating scale.

I summary, Sara is a fourteen year old girl with symptoms of depression and a recent suicide attempt. I consider her current suicide risk as mild to moderate. Predisposing factors for suicidality include her mother's history of suicide attempts; Sara's suicidal ideation, expressed as threats during arguments with her father; having less supervision and being in a new, isolating environment. Precipitating factors include the stresses of moving to a new city, being in a new school, and a fight with her father. Perpetuating factors include insufficient treatment and worsening depressive symptoms. Protective factors include strong social relationships prior to the move, which can be developed, and a willingness to start new treatments.

Sara's symptoms are also consistent with a major depression of mild to moderate severity comorbid with marijuana use disorder. She has not benefitted from treatment with lithium carbonate.

Management wise I would suggest that Sara is treated with interpersonal or cognitive behaviour therapy, initially addressing her depressive symptoms and her substance use. Her father may also need to be involved. Medication is not recommended at this stage.

Yours sincerely

Symptoms present

Key symptoms absent

Insight

Investigations

Formulation

Diagnosis

Summary of management