

ABSTRACT

Formulation, also called Conceptualisation, consists of a series of short phrases structured to represent the psychosocial aspects of a clinical experience. They represent the salient data obtained using the extension of the clinical methods of history, physical examination, and laboratory investigation. The clinical method of history is extended by using tools of genogram/timeline, the physical examination by psychosocial examination using tools to evoke the MIND, and by laboratory investigations using Socratic questioning tools of CAR-ACE. There are at least three ways in which the information in the formulation can be structured, namely Reason for Encounter (RFE); Complex or chaotic clinical situations using S-BAR; and Psychosocial subsystems using ROADS. The formulation may be used *de novo* or to augment the diagnoses before management.

Keywords: Reason for encounter; S-BAR; Psychosocial subsystems

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INTRODUCTION

There are at least three ways in which the information in the formulation can be structured, namely by:

- **Reason for Encounter (RFE)** by summarising the predisposing, precipitating, perpetuating, and the protective aspects;
- **Complex or chaotic clinical situations** using **S-BAR**, (Summary, Background, Assessment, and Recommendation); and
- **Psychosocial subsystems** using **ROADS**, to represent the Relationship, Ordering, Agency, Development, and Self/family identity of the living organism in homeostasis as members of an organised group or within the person, seen through lenses and filters.

The formulation may be used *de novo* or to augment the diagnoses before management.

DIAGNOSES

Diagnoses are labels or compound labels used to represent the bio-medical data obtained by the consultation methods and from which evidence-based management ensues.

The labels can be categorical, e.g., Using HBA1c to diagnose Diabetes mellitus; prototypical, i.e., diagnoses as defined by a panel of experts (e.g., Diagnostic and Statistical Manual in psychiatric illnesses); or traditionally labelled with eponymous names, e.g., Graves' Disease.

The labels can be compounded by onset (e.g., Subacute thyroiditis/Chronic thyroiditis), by disease progression (e.g., Chronic renal failure), or other adjectives or nouns.

Formulation and diagnoses can be used together or alone, namely, formulation without a definitive diagnosis and vice versa.

FORMULATION BY REASON FOR ENCOUNTER

Our objective is to formulate a list of issues that are relevant to our patient. Broadly, these can be thought of as the predisposing, precipitating, perpetuating, and protective issues surrounding the reason for encounter.

- **Predisposing issues** are those intrinsic factors that make our patient act or react as he has done. These may include his personality, experiences in his past, or even his genetic makeup.
- **Precipitating issues** are the triggers that led him to his current situation.
- **Perpetuating issues** keep the problem alive. These might include his social setup (or lack thereof), his attitudes and perspectives, or his habits.
- **Protective issues** are those positive features in his life that balance the negatives.

Together, the 4 Ps help us to think about our patient's problem in a systematic way.

CASE EXAMPLES

A. Case example of formulation by reason for encounter in a patient who does not adhere to prescribed therapy

Consider a diabetic patient who does not adhere to prescribed therapy. The issues could include his underlying personality, his work shift hours, his son's recent hospitalisation, the high cost of his medications, and his wife's continuing support and partnership. As a patient might have more than one reason for encounter, he might also have more than one set of 4 Ps formulation.

B. Case example of formulation in a patients counselled for Intermittent Explosive Disorder

The following are some statements that were made by Dorothy during the course of her sessions with Dr Lim, who counselled her for Intermittent Explosive Disorder.

- Dorothy said that she was frightened by "dad and his tantrums, when he came home drunk". "So, I would hide under the bed in the special bedsheet pocket sewn by [my maid]. [This is how] I learnt not to be afraid of dad."

- Of her mother: “[Mum] does not care. She should not have gotten married.” Her mother was “often absent; anxious”.
- She described the physical abuse: “[My sister] and I were forced to watch dad beat mum up” because her mother had not obeyed her father’s orders.
- During a family holiday to Malacca, her father threw her sister out of the car, after her sister intervened in a quarrel between her father and her mother.
- Dorothy received nurturing, emotional affirmation, and physical comfort from the family domestic helper from the age of two years. “She just knew how to speak to us in our own different ways. For me – I used to be afraid; very shy; I would always hide and refuse to eat [when my parents quarrelled].”
- She was close with her sister. “I was laughing so hard in the afternoons with [my sister] and the maid until I couldn’t breathe.”
- She remembered the emotional pain she went through when the helper returned permanently to her home country.

C. Case example of formulation of Dorothy’s anger and school failure

- Using information from previous chapters and from above, we can form the basis for the following list of formulations.
- **Predisposing Factors:** Violent, abusive father, who after losing his CPF money to his Chinese mistress, attempted suicide. He was subsequently reconciled to his estranged family but mother now assumed dominance.
- **Precipitating Factors:** Sister married and moved out of the family home. Dorothy was left alone and manipulated by her father into a coalition against her mother.
- **Perpetuating Factors:** Dorothy was frustrated in her self-appointed role as the parental child, attempting to be the “glue” between her parents to prevent the breakup of her family.
- **Protective Factors:** Her childhood domestic helper had been a nurturing proxy mother. She has current close emotional relationships with her boyfriend and her sister. She was also psychologically minded and therefore able to reflect and acquire insight with therapy.

FORMULATION BY S-BAR

S-BAR is another framework used for formulation. It is often used when the urgency of a situation requires a more focused and action-oriented evaluation. S-BAR stands for Situation, Background, Assessment, and Recommendation, with each phase contingent on the previous.

Although it was originally developed by the United States Navy for communication onboard nuclear submarines, S-BAR is now also used in healthcare as a strategy for standardised communication between healthcare providers, especially in complex and chaotic situations.

S-BAR as a whole transmits the discernment and judgement of the person reporting. As a narrative tool, it gives us a structure by which to summarise our assessment of the encounter. It is especially useful in a complex or even a chaotic situation, where a situational assessment becomes a practical necessity.

Figure 1. Medical student depicting family circumstances from his patient’s perspective



The drawing depicts the genogram of a young family trapped in a social and financial nightmare. Mum is heavily pregnant and has diabetes, requiring insulin injections. Dad is in prison. The youngest child is an infant, still swaddled. The older children are drawn with downcast faces. “The baby is not going to have a father” is a sad commentary on the family’s near-term expectations.

As physicians, we are concerned about the mum’s pregnancy. Diabetes in pregnancy carries its own burdens of dietary restriction, intrusive blood glucose monitoring, increased medical costs, and higher risk of poorer outcomes. On the other hand, the woman clearly has more than her diabetes to worry about.

Source: *Being Human*. CFPS, 2019: Pages 28-29

An S-BAR formulation of **Figure 1** may be as follows:

- **Summary:** The diabetic control of a pregnant woman in mid-trimester is out of control despite insulin injections.
- **Background:** She has four other young children with her husband in jail due to substance abuse and is in dire poverty.
- **Assessment:** Mother might lose this pregnancy. The young children also have poor care.
- **Recommendations:** (1) Refer mother to social workers for care intervention; (2) Work out care of children including monies; (3) Work out medical care of mother's pregnancy.

FORMULATION BY PSYCHOSOCIAL SUBSYSTEMS

Michael Mahoney (2003) proposes five psychological sub-systems that help maintain order in a family. Just as the various biological systems work together to maintain function in the body, these psychological subsystems interact and influence each other within the family unit. This is known as the emergence approach to understanding these psychological subsystems, and it recognises that family members and the family is not a static entity with fixed roles and functions. Rather, a family's dynamics are often shaped by the complex interactions between each family member and subsystem.

Looking at a family using the subsystems as a framework is like using cognitive lens and filters to view different facets of the family. There are five psycho-social subsystems:

- **R – Relatedness and relationships** within the family are established through social and symbolic processes, and may change throughout life.
- **O – Ordering processes of experience**, which refer to the spoken and unspoken patterns such as rules, routines, rituals, and roles within the family that impose structure upon members' interactions.
- **A – Active agencies**, which refer to causes supported by the family as well as its goals. We get an idea of what motivates family behaviours when we know what their active agencies are.

- **D – Development**, which is the process by which the values and beliefs of the shared experience are incorporated into the fabric of the family.
- **S – Self-identity and family-identity** are built on physical, spiritual, and social patterns and rules.

These can be remembered as ROADS, and it is an alternative method of formulation that is usually used for more complex situations. As an aside, ROADS can be applied in a parallel way to a person's mind as well. We can explore our relationships, the rules and patterns that we follow to create mental order, the values we hold and the causes we support, our development as a person, and our identity.

We can think of the family as a group of inter-related individuals that react to external changes, individually and as a group. When we try to understand our patient and his family, a metaphor from photography is helpful. We can consider looking at the family through lenses and filters.

In photography, we use different lenses to focus on the details and on the big picture. In the same way, we need to study our patient as an individual and in the context of his big picture, which is his family. Also, we use filters to modify what we see in a picture, so that certain features become more distinct with certain filters. When we work with the family, filters are useful to help us analyse different facets of a family.

We use these lenses and filters to frame different views of the same family, like how we use different maps of the same territory to add to our final understanding of the terrain. We need to add two additional filters: culture and gender. A multicultural perspective makes the individual more complex, and we might need to challenge dominant cultural views. Gender roles are both well-established and rapidly changing, and affect both the family and its individuals.

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LEARNING POINTS

- **There are three ways of representing the formulation, namely, the 4 Ps formulation; S-BAR formulation by the clinician for complex/chaotic situations; and the ROADS formulation of psychosocial subsystems of the person or group.**
- **Each of the three ways of formulation is achieved by analysing data gathered, including the genogram and timeline data.**
- **Biopsychosocial interventions can be planned after considering the patient's readiness to change.**
- **We may choose one or more psychological approaches to deal with our patient's extended consultation issues, depending on his personalised list of formulation of issues, just as we choose the biomedical treatment based on his diagnosis such as pattern, problem, presence, or positive work.**