CHAPTER 5

Formulation and Case Review

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Abstract A formulation integrates information derived about a patient to inform diagnosis and management. Cases referred to the Walker Unit are complex, and are likely to have been reformulated many times in the light of new information, and in response to evolution in the clinical problem. After a period of observation, assessment and investigation, the multidisciplinary team develops a formulation using a Five P structure, and identifies the patient's strengths and vulnerabilities. The process informs the development of a management plan which is presented to the patient and family for comment and endorsement. The process is repeated at six to eight weekly intervals throughout the admission. In addition, weekly case review meetings occur to examine progress against treatment goals, and to fine tune the management plan.

Keywords Adolescent psychiatry • Protective factors • Prognosis • Social environment

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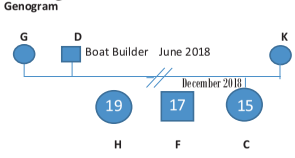
Background

The formulation is a set of explanatory hypotheses or speculations that link the findings from the history (obtained from multiple sources), mental state examination, family assessment and investigation. According to guidelines prepared by the Royal Australian and New Zealand College of Psychiatrists (RANZCP) the formulation addresses the question: 'Why does this patient suffer from this (these) problem(s) at this point in time?' (Royal Australian and New Zealand College of Psychiatrists, 2012). As such, the formulation is a living document that will be modified as new information comes to light. Two common models for organising the formulation in child and adolescent mental health are the biopsychosocial formulation and the Four Ps (Henderson & Martin, 2014). As the name suggests, the biopsychosocial formulation organises information into biological, psychological and social domains. The model is intended to encourage holistic thinking, rather than attributing a child's problem to a single cause. Examples of the latter are attributing depression solely to an inherited predisposition to neurotransmitter dysfunction (biological), or anxiety solely to the experience of bully victimisation (social). The Four Ps model is a more sophisticated extension of the biopsychosocial formulation that allows consideration of chronology and aetiology, and suggests targets for intervention. The model considers predisposing, precipitating, perpetuating, and protective factors (Henderson & Martin, 2014). Variations of the model include statements about the presentation, pattern and prognosis (Nurcombe, 2014). In some versions there is a statement about management (Royal Australian and New Zealand College of Psychiatrists, 2012).

Formulation as Applied at the Walker Unit

The Walker Unit team uses an adaptation of the Four P model which adds a statement about the presentation (see Table 5.1). We are mindful that formulation in child and adolescent psychiatry must take into account the developmental trajectory of the child, and consider the possibility that problems may be evolving rather than fixed. The *presentation* covers relevant signs and symptoms as well as pertinent negatives (i.e., key absent symptoms). We also consider incongruencies, that is, features that do not seem to fit with the overall pattern of symptoms. An example is a 14 year old boy who appeared to have major depression, but was needing to sleep

Table 5.1 Example of a care plan

Clare MRN XXXXX03 *1st Care Plan - 4 August 2021* *Page 1*	*Issues problems*	*Discussion/intervention*	*Staff*
Genogram  	Strengths/achievements – Motivated to change – Friendly – Polite	– Respecting boundaries – Less oversharing	Clare
	Psychiatric Diagnosis – Persistent depressive disorder – Posttraumatic stress disorder	– Complete structured diagnostic interview	Psychiatrist
Presenting – Emotional dysregulation – Interpersonal difficulties – Escalating self-harm – Complex posttraumatic stress disorder	Medications – Fluoxetine – Prazosin – Melatonin – Quetiapine - as needed	– Consider switch to a more sedating antidepressant to replace fluoxetine, prazosin and melatonin	Psychiatrist/ psychiatrist in training
Predisposing – Wilm's tumour in early childhood and its treatment – Family history mood disorder, substance abuse	Risks – Sexual safety – Interpersonal conflict – Medical complications of Wilm's tumour treatment	–Monitoring	Team

(*continued*)

Table 5.1 (continued)

Clare MRN XXXXX03 *1st Care Plan - 4 August 2021* *Page 1*	*Issues problems*	*Discussion/intervention*	*Staff*
Precipatating – Parent discord and separation – Sibling mental illness – Sexual safety incidents in and out of hospital – Changing parent roles	Sensory/living skills – Independent in activities of daily living	– No action required	
Perpetuating – Challenges to treatment engagement – Family communication – Estrangement from mother	Individual therapy – Dislikes pauses and silence in verbal – Cannot tolerate full session – Tolerates silence in visual modality	– Speak to previous therapists – Structured approach—Cognitive Behaviour Therapy – Individual art therapy	Psychiatrist in training Art therapist
Protective – Parent support for treatment – Evidence of resilience	Family therapy – H absent from sessions – Unresolved feelings about Wilm's tumour	– Engage H – Session with father's new partner, G	Clin psychologist/ psychiatrist

Clare MRN XXXXX03 1st Care Plan - 4 August 2021 Page 2 Signatures Doctor Patient Parent/Guardian	Group therapy – Engages well in groups – Tests boundaries	– Maintain boundaries	Team …/2
	School – Capable at year level – Gaps in knowledge owing to missed time	– Liaise with home school	Learning centre staff
	Physical health – No known residual problems from neoplasia	– Obtain paediatric oncology records	Psychiatrist in training
	Plan/discharge/follow-up –EstimatedDateofDischarge:- – Friday, 4 Nov 2021		
	Goals – Improved interpersonal relations – Engagement with school	– Negotiate other family goals	Clin psychologist/ Psychiatrist

as soon as he returned home from school. An MRI investigation revealed he had a pituitary adenoma. Family dysfunction is a dominant *predisposing* factor in most cases admitted to the Walker Unit (see the case example below). *Precipitants* may be discrete and obvious, such as exposure to a traumatic event. More typically, precipitants are diffuse events that have multiple impacts. Examples include the separation of parents, or the transition from primary school to high school. Sometimes it is not clear cut if something is a precipitant, or part of the presenting problem. An example might be ingestion of high potency cannabis followed by a psychotic episode. Is the drug use simply a trigger for the psychosis, or is it part of the presenting problem (e.g., an attempt at self-medication, or part of a more extensive substance use disorder?). Given the chronicity of the problems experienced by young people admitted to the Walker Unit, there are almost always *perpetuating* factors. Addressing them is an essential component of our therapeutic work. An example is a 17 year old girl who repeatedly sabotaged her treatment in the community through non adherence and disengagement. After a promising period of improvement in response to new treatment, the same pattern recurred during hospitalisation. Family work identified that although the parents were legally separated, there was blurring of boundaries between households and generations, and ambiguous communication between the parents. Family therapy promoted clearer communication between the parents, and a better delineation of household and generational boundaries. The patient was then able to engage productively in her own psychotherapy and art therapy, and accepted and responded to pharmacotherapy. *Protective* factors reduce the impact of stressors and symptoms, and promote recovery. Examples include personal attributes or skills, or features in the social environment such as a supportive school. Protective factors may be conspicuously absent in patients referred to the Walker Unit. We endeavour to be genuine rather than tokenistic in describing protective factors, as it is not helpful to say things simply to 'be nice'.

We anticipate that by the time a young person reaches the Walker Unit there will have been multiple formulations. Indeed, we ask the referring child and adolescent psychiatrist to provide a formulation which, ideally, should make clear the indications for a longer stay high severity admission. The Walker Unit team allow themselves about three weeks to undertake observation and targeted assessment before attempting a reformulation. It is presented during the first of what will typically be several meetings of

the clinicians directly involved in the young person's care (the Mini Team) that occur during the course of hospitalisation.

Example of a formulation:

> Clare is a 15 year old female presenting with repeated self-harm, non-organic abdominal pain, low distress tolerance, oppositionality, low mood, hypervigilance and sleep problems. Her difficulties occur in the context of estrangement from her mother, peer problems, and school disengagement. The problems began around the onset of puberty. Predisposing factors are genetic vulnerability (as evidenced by mental illness in Clare's mother and brother), a tendency to adopt the sick role (stemming from the experience of Wilm's tumour in early childhood), impulsivity and rejection sensitivity. The diagnosis of Wilm's tumour and its treatment had a profound impact on the family. Clare's mother was for a long time disengaged from Clare's two elder siblings. The elder sister responded by adopting a pseudo parental role, while the brother became anxious and, eventually, depressed. Following Clare's recovery her mother slipped into depression and substance misuse. The parents had a conflicted separation. Perpetuating factors are the breakdown of parental authority, carer burnout, and the splitting and fragmentation of treatment services. In addition, multiple hospitalisations in crisis have led Clare to become experienced in the role of a mental health patient. Protective factors are the low lethality of the self-harm, and the observation that Clare is both resourceful and articulate. Despite their differences both parents are committed to Clare's treatment and recovery. The presentation suggests complex post-traumatic stress disorder or personality disorder. A major mood disorder is less likely. Residual cognitive deficits arising from chemotherapy need to be ruled out.

At the first Mini Team meeting the formulation is placed in a template alongside columns for issues/problems and discussion/intervention on a whiteboard. From this process flows a set of actions. The whiteboard work is transcribed to a word document and presented to the young person and their family for discussion and consent (see Table 5.1). As such the language used needs to be 'consumer friendly'. We do not, however, suppress content that may be confronting to family members. In Clare's case, for example, we were explicit about mother's substance misuse. The Care Plan is the road map for clinical care. It highlights matters that require intervention, but also indicates where the patient is already functioning adequately. In Clare's case for example, unlike many of the patients on the unit at the time she was fully independent with her self-care.

Case Review

The multidisciplinary team meets weekly to review the progress of all current inpatients. The group is much larger than the Mini Team and includes medical and allied heath staff, Learning Centre staff, peer support worker, at least one nursing team member, and the pharmacist. As such it is labour intensive, and therefore must be run efficiently. The meeting is chaired by the Unit Director and follows an agreed structure (see Box 5.1). Ten minutes is allocated to each case.

Box 5.1 Format of Case Review for Each Patient

1. Nursing report
2. Learning Centre report
3. Individual therapies
4. Family therapy
5. Group therapies, including peer support
6. Physical health and medication
7. Achievement level and leave considerations

Staff are encouraged to be structured and succinct in their reports. Discussion is welcomed, provided it is focused on the interests of the patient. The Chair needs to be vigilant and respond to dynamics that can derail the case review process. Examples include:

1. A staff member uses the presentation as a forum to debrief about their interaction with the patient or family. The Chair will encourage the staff member to take the issue outside of Case Review and discuss informally, or in supervision.
2. The case discussion uncovers some inconsistencies or errors in ward policy and procedure. The Chair will redirect these matters to the monthly staff meeting.
3. The case discussion uncovers splitting in the staff. The chair will redirect the matter to bi-weekly external supervision.
4. Strong opinions are expressed in the absence of information. The Chair encourages participants to follow clinical process and first gather sufficient information.

A successful case review will monitor progress against treatment goals, and fine tune the management strategies that have been outlined in the Case Plan. Examples of the latter could include adding individual art therapy for a young person who experiences difficulty verbalising emotions in talking therapy, or engaging the occupational therapist to provide training on public transport use to a young person who will need to travel by train to their new school of enrolment after discharge. Profound changes in management, such as an amendment to the discharge destination, are typically reserved for the more in-depth Mini Team reviews. Mini Team reviews also provide the forum for the clinician completed rating scales mandated by the state health authority. These are; Health of the Nation Outcome Scale for Children and Adolescents, Clinical Global Assessment Scale, and Factors Influencing Health Status.

Conclusion

Formulations and case review promote a team consistent approach with the aim to be containing for the family and the young person during their journey at the Walker Unit. The formulation changes over the admission and the family as a whole learn to adopt a broader (non-linear) thinking which takes the focus away from the identified patient. By coming up with evolving care plans and asking the patients to contribute to the weekly case reviews the young person is encouraged to advocate for themselves and learn to problem solve. It is not unusual that towards the end of an admission families and patients have adopted this way of thinking and during extended leave periods they are able to manage difficulties without the assistance of professionals.

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