DIAGNOSIS AND TREATMENT PLANNING IN CHILD AND ADOLESCENT MENTAL HEALTH PROBLEMS

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Conflict of interest: none reported.

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Suggested citation: Nurcombe B. Diagnosis and treatment planning in child and adolescent mental health problems. In Rey JM (ed), *IACAPAP e-Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions 2014.

The term *diagnosis* is derived from a Greek word meaning *distinguishing*, *discernment*, or *deciding*. *Diagnosis* was used by Hippocrates to refer to the process of medical reasoning. Today, it is applied to both the process and the product of decision-making.

Diagnosis has a number of functions, it:

- Allows clinicians to describe cases from a common perspective
- Enables the collection of data for administrative purposes
- Can be used for scientific purposes such as to collect cases of a similar nature and to expose them to contrasting treatments
- Is the key to treatment planning.

This chapter concerns the formulation of a diagnosis in such a manner as to facilitate individualized treatment planning.

A mental disorder is a clinically significant pattern of psycho-behavioural symptoms and signs associated with current distress or impairment experienced by the patient or people in the environment or with the risk of future distress or impairment. The concept of *disorder* falls short of the scientific validity of *disease*. Disorder and disease convey biological disadvantage (Scadding, 1967). Some of the disorders described in DSM-5 (American Psychiatric Association, 2013) or ICD-10 (World Health Organization, 1992) may be distinctive and categorical; however, most are likely to be dimensional, with diagnostic 'cut-off' points that are determined arbitrarily or by statistical formulae. This is of particular importance when a number of behavioural disturbances coincide and it is debatable whether polymorphous dimensionality or categorical comorbidity apply. To the extent that it is dimensional, a disorder is likely to have been determined by a variable mix of genetic and temperamental factors with learned adaptive responses (e.g., conduct disorder), whereas a truly categorical disorder is likely to have a biological basis (e.g., Rett syndrome). Not all disorders or syndromes will prove to predominantly be categorically distinct; and some that appear to be categorically distinct today will eventually turn out to be heterogeneous.

The clinician combines the distinction of categorical prototypes with an eliciting of the dynamic factors involved in the genesis and perpetuation of the patient's condition. This chapter deals with the way a diagnostic formulation can be framed in such a manner as to assist treatment planning.

THE DIMENSIONS OF DIAGNOSIS

It is useful to conceptualise diagnostic formulations in three axes or dimensions (see also Chapter A.10):

- Biopsychosocial
- Developmental and
- Temporal.

The biopsychosocial dimension

At any one time, a patient is composed of functions at biological (bottom), psychological and social (top) levels (e.g., molecular, cellular, and organ system

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Diagnosis was used by Hippocrates to refer to the process of medical reasoning. Today, it is applied to both the process and the product of decision-making.

Categories versus dimensions

A categorical diagnosis implies a clear, qualitative difference between having and not having a disorder (e.g., breast cancer) while a dimensional diagnosis implies a quantitative difference (e.g., hypertension).

There has been much debate about the merits and shortcomings of either approach. In practice, a categorical approach to diagnosis is clinically more practicable (e.g., indicating need for treatment). Nevertheless, most recent classifications (such as DSM-5) try to incorporate both approaches, for example, by including ratings of severity in diagnoses or by defining a 'spectrum' (e.g., autism spectrum disorders). For more details see Chapter A.3.

functioning; unconscious and conscious psychological functioning; and familysocial adaptation). Each level emerges from the level below. No level can be reduced to the level below, although science may seek to find associations between levels (e.g., between molecular synaptic dysfunction and psychosis).

The physician analyzes the following levels in formulating diagnosis:

1. Physical level

- Peripheral organ symptoms
- The immune system
- The autonomic nervous system
- The sensorimotor systems
- 2. Psychological level
- Information processing (orientation, attention, memory, comprehension, judgement)
- Learning
- Communication
- Attitude to self and others
- Social competence
- Psychological symptoms
- Unconscious conflicts and ego defences

3. Social level

- Family structure and dynamics
- Social relations
- School and occupational adjustment

The developmental dimension

The clinician evaluates the different systems within the biopsychosocial axis to determine whether any are abnormally *delayed*, *advanced*, or *deviant* in relation to what could be expected at the patient's age. Autism, for example, is associated with delayed and deviant development (e.g., in communication, social relations, and verbal reasoning). The developmental dimension is most important in the evaluation of children and adolescents.

The temporal dimension

A human life is like a film: it begins from somewhere, is seen as though in a freeze-frame, and is proceeding to a future. The temporal dimension requires an understanding of the following:

Predisposition

What are the physical, psychological or social influences – genetic, intrauterine, perinatal and early developmental – that predisposed the patient to

be psychologically disturbed at the time of examination. Were there any sources of stress, trauma, or deprivation in the formative years?

Precipitation

Is there evidence for a physical or psychosocial stressor that coincided with the onset of the psychological disturbance and could have pushed the individual into disequilibrium? Common stressors include physical illness (e.g., hepatitis causing depression), exposure to psychological trauma or loss, marital discord and separation. Some recent psychological stressors may be recapitulations of unresolved childhood traumata. Not all current problems are precipitated: some (e.g., autism) have gradually evolved from an earlier predisposing deviation or delay.

Presentation

It is useful to ask, *why now?* If a problem has been apparent for some time, why is the individual or the family presenting for help at this time. Has an additional stress caused failure in the previously compensated physical or psychosocial system?

Pattern

The pattern of biopsychosocial symptoms and signs constitutes the current disturbance (phenomena representing the disorder or disorders identified according to DSM or ICD). Do the symptoms and signs represent a decompensation or impending decompensation of inadequate adaptation (with anxiety, somatization or the discharge of tension), the emergence of more primitive coping mechanisms (e.g., denial, repression, dissociation), the fragmentation of mental functioning (as in psychosis), or the residue of past decompensation (as in chronic conversion disorder)? Do the symptoms have an unconscious communicative or mimetic (imitative) function (as in some forms of conversion)? If so, what is being communicated and to whom? Are the symptoms predicated upon actual or imagined physical illness?

Perpetuation

Many psychological problems are short-lived; the precipitating stress dissipates or is coped with, sometimes with enhanced functioning. But what of problems that do not abate? What keeps them going? Does the precipitating factor persist in such a way as to perpetuate the disequilibrium? Do pathological coping mechanisms cause further stresses that keep the problem alive? An understanding of precipitation and perpetuation is essential to treatment planning.

Prognosis

What do you predict will be the outcome, with or without treatment? Does the condition warrant treatment or is it likely to abate spontaneously?

Potentials

Do not focus solely on problems and defects. What biopsychosocial assets does the patient have? Physical beauty, physical strength, artistic ability, sporting talent, social skill, mechanical ability, for example, can all be harnessed to compensate for defects or problems, in a comprehensive treatment plan.

The diagnostic formulation can be derived from a combination of biopsychosocial, temporal and developmental axes in a matrix, as illustrated in Figure A.11.1.

The biopsychosocial diagnosis (Nurcombe & Gallagher, 1986) helps the clinician to identify the foci of a treatment plan, the pivots around which treatment is designed. Other diagnostic systems (e.g., Amchin 1991; Faulkner et al. 1985; Leigh & Reiser 1993; Perry et al, 1987; Shapiro 1989; Sperry 1992; Sperry et al, 1992) have been proposed but only Shapiro (1989) gives adequate weight to psychodynamic, developmental, educational and family factors.

Figure A.11.1 Integrating the data as a diagnostic formulation: the diagnostic matrix

	Predisposition	Precipitation	Pattern	Perpetuation	Potential
Physical					
Psychological					
Family/Social					



Children performing at the opening ceremony of the 2010 IACAPAP World Congress in Beijing

CASE EXAMPLE: THE DIAGNOSTIC FORMULATION

Janet, aged 17 years, is the first-born child of divorced parents. She has one brother (aged 10 years) and a half-brother (aged 2 years) born to her father's second wife. Janet has been referred by her family practitioner who is concerned about her depression, suicidal ideation, and self-cutting following date-rape 18 months before. Janet had only recently revealed the rape to her doctor. She did not wish to complain of it to her mother or the police. Her doctor wondered if she had posttraumatic stress disorder.

Janet presents as an attractive, stylishly-dressed young woman who relates well to the examiner, appearing mature for her years. She weeps briefly when she explains what happened to her 18 months before. The house was empty because her mother and brother were visiting a relative. Janet brought home a casual male school friend who overpowered her and had forcible sexual intercourse with her. Afterwards, Janet felt outraged, guilty, and "out of touch" with the world and her body. She did not tell her mother or the police because she was aware of how foolish she had been. In fact, she had been having sexual intercourse with a number of boys, not out of love ("I'm too young for love") but because she wanted to feel someone close to her. Asked to reflect upon why she wanted someone close to her, she told the following story.

About three years before, her father, a teacher, was away from home, attending an educational course in another city. One day, he telephoned his wife to say that he had fallen in love with another woman and wanted a divorce. He did not return home. Janet's mother, a realtor, was devastated. Janet supported her and assumed much of the mothering of her younger brother.

After her parents divorced two years before, Janet began to visit her father, her stepmother, and her baby half-brother. However, her father whom she had previously adored ("I was Daddy's girl") was critical of her, complaining that she had gained a little weight (five pounds) after she stopped dancing following an ankle injury. He and she quarrelled. He told her she was ungrateful and disrespectful. Her stepmother supported her father. Janet stopped visiting her father about twelve months before, and had not spoken to him since.

Janet complained of depressive feelings without insomnia or change of appetite. She had vague thoughts of suicide. Sometimes she felt "out of touch" with her body and the world around. From time to time she cut her upper thighs with a razor blade in order to relieve a feeling of emotional "deadness".

Janet's mother knew nothing of the date rape, and the clinician did not speak of it to her. She said that her daughter had become depressed and irritable since the divorce. She, herself, had been treated for depression in the aftermath of the separation, but she had recovered and was now working full-time. She was estranged from her ex-husband and did not communicate with him.

There is no family history of mental disorder, learning problems, or antisocial behaviour. Janet's mother said that her pregnancy with, and delivery of, Janet were normal. Janet was a wanted child whose developmental milestones were advanced. She was close to both parents, but particularly to her father whom she idolized. She had always been "a second mother" to her younger brother. She had had no significant medical illnesses, surgery or accidents. A bright child, she had always been a good scholar. She planned to go to college.

Diagnostic formulation

Janet is a 17-year-old Caucasian adolescent female from a middleclass background, the oldest of three siblings. Her early life was uneventful and she grew up a bright, sociable child very close to her adored father. This close bond to the father predisposed her to a depressive disorder precipitated by the unexpected abandonment of his family by her father. In the aftermath, she supported her depressed mother and mothered her brother. However, she fell out with her father who, possibly because of his own guilt, became critical of her. She became estranged from him when she felt displaced in his affections by her two-year-old half-brother. Searching for emotional relief, she became sexually promiscuous. The rape occurred in this context. Her depressive symptomatology then became complicated by guilt, self-hatred, depersonalization, vague suicidal ideation, and self-cutting (to relieve emotional unresponsiveness). Her current psychiatric condition is perpetuated by the loss of her father, and her failure to communicate with her parents about her predicament. With appropriate treatment, the prognosis is good. Without treatment, her depression is likely to become chronic and her adult emotional relationships empty, unfulfilling, and conflictual. However she has many strengths, particularly intelligence, social skills, and artistic ability (ballet).

In summary, Janet has a mild depressive disorder. She does not have posttraumatic stress disorder (lacks flashbacks, nightmares, or autonomic hyperarousal), but she suffered an acute stress disorder, now attenuated in the aftermath of date rape, with depersonalization and suicidal ideation. A goal-directed treatment plan will be designed in the next section.

MODELS OF TREATMENT PLANNING

Four styles of treatment planning are used by clinicians. The first is intuitive, the others are deliberate:

- 1. Therapy matching
- 2. Problem orientation
- 3. Focal inpatient treatment planning
- 4. Goal-direction

Therapy matching

This is the natural mode, the pattern-matching technique used by most clinicians. Given a clinical pattern (e.g., seven-year-old male child; hyperactive, fidgety, inattentive and impulsive; learning problems; parents coercive and punitive; intelligence probably at the lower end of the average range) the clinician matches a diagnostic and treatment plan (e.g., intelligence and educational testing; parental and teacher education; possible remedial education; stimulant medication; possible behavioural program to facilitate concentration). The child's progress in treatment is assessed globally until the family is satisfied that the child has improved, or is dissatisfied and terminates treatment. Although therapy matching is rapid, efficient, and *natural*, it has serious defects. The absence of specific foci and estimations of the time required to produce change in the foci leads to vagueness and potential "drift": the therapist is not held accountable for deciding if the treatment plan is working and for changing treatment if it is not. When a clinical team is involved in providing treatment, as in an inpatient setting, it may become uncoordinated since the team lacks an explicit logic for role assignment and joint decision making.

Problem orientation

Weed (1969) introduced the *problem-oriented record* to medicine in order to overcome the lack of coordination between highly specialized inpatient programs. In the Weed system, diagnostic and treatment problems are extracted from the data base. The problems either become inoperative or are stated as categorical diagnoses for which specific treatment or treatments are prescribed. Subsequently, therapeutic problems remain active, become inactive, or are resolved. The explicit logic of the system fosters communication and collaboration, and prevents the patient from slipping through the cracks between organ specialities.

Unfortunately, problem orientation has not been successful in psychiatry. Grant & Maletzky (1972) recommended that psychiatric problems be stated as deviant behaviours in need of extinction or deficient behaviours in need of enhancement. However, there are no guidelines for extracting problems from the data base or deciding how they should be integrated. Too often, the problem-oriented record degenerates into a fragmented list of *behaviours* that misses the gist of a dynamically interacting pattern. Thus, it risks being regarded by the treatment team as "paper work" undertaken to satisfy external review.

Focal Inpatient Treatment Planning

Harper (1989) introduced *focal planning* to facilitate treatment in inpatient settings. The clinician identifies one focal problem, formulates it in operationalized terms, and ties treatment to diagnosis by means of explicit objectives. Employing explicit, jargon-free language, the plan is accessible to both the clinical team and the patient and family. Focal treatment planning is closely allied to *goal-direction*.

Goal-Directed Planning

Goal-direction was introduced by Nurcombe & Gallagher (1986) and Nurcombe (1989). Pivotal treatment foci are extracted from the diagnostic formulation. Pivotal foci are those aspects of the diagnosis that are both alterable and likely to produce the greatest overall effect when changed. In choosing goals and treatment the clinician must have regard to the time, funds, and resources available. In contrast to focal inpatient treatment planning, goal-direction is applicable to all treatment settings: inpatient treatment, for example, aims at the rapid *stabilization* of dangerous behaviour prior to extended treatment. Residential or outpatient treatment involves one or a combination of the *resolution* of conscious or unconscious conflict, the *remediation* of defect, *re-education, rehabilitation*, the *reconfiguration* of the family, and the *promotion* of strength and assets to compensate for defect. The problem-oriented record was initially introduced to medicine in order to overcome the lack of coordination between highly specialized inpatient programs. Unfortunately, problem orientation has not been successful in psychiatry.

DESIGNING A GOAL-DIRECTED TREATMENT PLAN

The steps of goal-directed treatment planning are as follows (Figure A.11.2):

- 1. Identify pivotal problems and potentials
- 2. Rewrite the problems/potentials as goals
- 3. Estimate the time required to reach each goal
- 4. For each goal identify at least two objectives
- 5. For each goal decide a treatment or treatments in accordance with the evidence base, sociocultural appropriateness, and the resources available
- 6. For each goal/objective identify a monitor to determine if treatment is progressing or if the goal has been attained.

Identify problems and potentials

The solo clinician (or clinical team in conference) extracts from the biopsychosocial diagnostic formulation those pivotal problems or potentials

Figure A.11.2 Goal-directed planning



which, if altered, removed or enhanced, are likely to produce the greatest benefit. For example:

- The physical or psychosocial stresses that predispose the patient to develop a disturbance in the future.
- The physical or psychosocial stressors that perpetuate the current disturbance
- The physical, psychosocial or administrative factors that led to the patient's referral
- Factors from the current biopsychosocial pattern that are capable of change: physical and neuropsychological dysfunction; symptoms considered as coping style.

Stabilization, remediation or compensatory goals are abstracted from the formulation by asking these questions:

- Which symptoms, signs, impairments, behaviour, emotions, dispositions or dysfunctions must change if the patient is to be treated at a less restrictive level of care?
- Which precipitating or perpetuating factors can be changed or eliminated?
- Which potentials can be promoted in order to compensate for dysfunction or defect?

Typically, four to six problems and one potential are required for a comprehensive plan. Generally speaking, problems are *behavioural* (e.g., self-cutting), *psychological* (e.g., unresolved conflict concerning childhood sexual abuse, *familial* (e.g., parent-child estrangement or parental dissension), *social* (e.g., poor peer relations), *educational* (e.g., learning disability), or *medical* (e.g., unstable diabetes mellitus). Each problem and potential represents what the clinician or team aims to help the patient and family address.

Rewrite problems/potentials as goals

Treatment aims to change problems/potentials, for example:

- Reduce the intensity of depressive mood
- Reduce the frequency of compulsive behaviour
- Resolve conflict concerning past abuse
- Foster more empathic parent-child communication
- Promote consistent, supportive parental discipline (i.e., reverse coercive parenting)
- Foster (enhance) artistic ability.

Choosing the therapies

For each pivotal problem or potential, the clinician selects a therapy or set of therapies appropriate to the patients' and families' needs, using these criteria. In this kind of case which therapy:

- Has the greatest empirical support (i.e., evidence base)?
- Is the least risky (e.g., with fewer side effects)?

- Best matches the clinical resources available?
- Is the most economic of time and money?
- Best matches the family's sociocultural characteristics?

The target date

The clinician estimates how long it will take for the therapy or therapies to be effective (i.e., for the goal to be attained). The date is a benchmark against which progress can be gauged.

Designing the objectives

An objective is what the patient or family will be like when a goal is attained, in contrast to a goal which represents what the clinician or team aim to do to help the patient. Written objectives are samples of behaviour that monitor goal attainment. Objectives also indicate the degree to which a goal will be attained. A goal without an objective risks becoming an empty abstraction. Objectives without goals run the risk of missing the gist of the matter. Here is an example from inpatient treatment:

Goal: Reduce the intensity of depressive mood/suicidal ideation

Objectives:

- On daily mental state examination, the patient will reveal no depressive affect and no suicidal ideation for two continuous weeks
- Nurse observers will note that the patient is mixing with peers
- The teacher will report that the patient is applying herself to schoolwork
- The parents will report that the patient is no longer depressed and that she is making constructive plans.

Evaluation

In some cases, physical measures (e.g., body weight in eating disorder), symptom counts (e.g., attempts at self-injury in autistic disorder) or test results (e.g., change in rating scale scores) can be used. However in many cases, empathic mental status examination is the most appropriate method of evaluation.

The process of Goal-Directed Treatment Planning is illustrated in figure A.11.2. Essentially, the clinician asks:

- What is the destination (goal)?
- By what route will the patient get there (*treatment*)?
- How will you know the patient is on track to, or has reached, the destination (*objectives*)?

Teamwork

Goal-directed treatment planning allows a clinical team to plan, collaborate, and implement treatment from a common intellectual scaffolding. Each team member knows what he or she must do to implement therapy and monitor the An **objective** is what the patient or family will be like when a goal is attained.

A **goal** represents what the clinician or team aim to do to help the patient. objectives. Communication with external reviewers becomes clearer and more concise.

Negotiation with the Family

The diagnostic formulation and treatment plan is discussed with the family. The goals, therapies, and cost (in terms of time and money) are described. The family has the opportunity to agree or disagree with, or modify, or make choices, within the plan. The family and the clinician or team agree to collaborate, signing the plan, a copy of which is made available to the family. Thus, fully informed consent is obtained.

Revision

Attention to the objectives will alert a clinician if treatment stalls, the patient deteriorates, or unacceptable complications arise. The master plan may need to be revised. Do the goals adequately represent the essence of the patient's disorder? Are the goals and objectives practicable? Do the objectives reflect the goals? Are the prescribed therapies appropriate, and are they being delivered faithfully? Should the goals and objectives be rewritten?

DISADVANTAGES AND OPPORTUNITIES

Goal-directed treatment planning takes time to master. It is best taught by modelling in workshops and case conferences. Some clinicians are reluctant to specify target dates or objectives. Others resent the time required to produce "paperwork", preferring to operate in an intuitive, therapy-matching mode. Psychodynamic goals are admittedly more difficult to frame in contrast to medical, educational or behavioural objectives. However, once a plan has been articulated, the educational, communicative, regulatory, and medico-legal advantages become apparent. Finally, goal-directed plans can facilitate research into the relative effectiveness of different therapies.

CONCLUSION

The reliability with which clinicians make psychiatric diagnoses has improved since the introduction of the DSM. However, the validity of DSM diagnostic categories is uncertain. Insel (2013) points out that the DSM diagnostic

> Click on the image to view Dr Nurcombe summarise goal-directed treatment planning (2:44)



CASE EXAMPLE: THE TREATMENT PLAN

To return to Janet, the 17-year-old with depression, suicidal ideation and self cutting following date rape superimposed on unresolved grief caused by paternal loss, the following pivotal problems and potentials can be identified:

- Depression/suicidal ideation
- Unresolved grief following loss of father
- Unresolved stress reaction following date-rape with self-hatred and self-cutting
- Poor family communication; parent-parent and father-patient estrangement
- Artistic ability.

These problems can be rewritten as five goals:

- 1. Relieve depressive mood and eliminate suicidal ideation
- 2. Resolve grief following loss of father
- 3. Resolve stress reaction following date rape
- 4. Foster better parent-parent and parent-child communication
- 5. Promote artistic ability

For each goal, the following therapies could be instituted:

- 1. Relieve depressive mood:
 - Individual psychotherapy (dynamic or interpersonal), weekly, for 12 weeks, tapering off up to six months
 - Antidepressant medication (if psychotherapy alone after four weeks is ineffective)
- 2. Resolve grief following loss of father
 - Individual psychotherapy, as above
- 3. Resolve stress reaction following date rape
 - Individual psychotherapy, as above
- 4. Enhance family communication
 - Family therapy, weekly for 3 months
- 5. Foster artistic ability
 - Encourage patient to resume ballet training.

Treatment, thus, involves a combination of individual psychotherapy, antidepressant medication, and family therapy, adjusted and titrated according to the patient's progress over six months.

The objectives for each goal are as follows:

- 1. Relieve depressive mood
 - No depressive mood (or a score in the non-clinical range in a depression rating scale) or suicidal ideation on mental status examination for two months.
 - · Good peer interaction without sexual promiscuity
 - Satisfactory school progress.
- 2. Resolve grief
 - In individual therapy, the patient will appreciate the connections between loss, depression, the need for love, and sexual promiscuity.
- 3. Resolve stress reaction
 - In individual therapy, the patient will understand the connection between rape trauma, low self-esteem, and self cutting
 - No self-cutting for one month.
- 4. Promote family communication
 - Parents will be able to plan together in Janet's best interests
 - Janet will be able to tell her parents how she was affected by their separation
 - Janet will resume visits with her father and these will be mutually satisfactory.
- 5. Foster artistic ability
 - Janet will resume ballet training.

system is based on the consensus of committees about symptom clusters, not on objective measures. Symptoms alone rarely indicate the best treatment. Insel recommends that psychiatry design a classificatory system linked to cognitive, neural circuit, and genetic biomarkers. Such a system, he contends, is more likely to be an accurate guide to treatment.

However, psychological disturbance varies in specificity from categories (e.g., bipolar disorder) to dimensions (e.g., borderline personality disorder). Some disorders are related primarily to psychosocial predisposition, precipitation and perpetuation, and treatment must be directed to individual and family psychopathology as well as to the biology of anxiety or depression, for example.

The biopsychosocial diagnostic formulation and Goal-Directed Treatment Plan are designed to account for both the biological and the psychosocial factors at the heart of psychopathology. It contrasts with reductionistic approaches that deal exclusively with either biological or psychosocial factors alone.

Practice these skills in the case in the Appendix

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Appendix A.11.1

Below is the summary of a hypothetical case (a composite of several real patients) kindly provided by Associate Professor Dr Susan MK Tan, Department of Psychiatry, Faculty of Medicine,Universiti Kebangsaan Malaysia Medical Center (UKMMC), Kuala Lumpur, Malaysia). Please read the case, make a provisional diagnosis and a problemoriented treatment plan as described in the chapter. You may then compare your plan with the model answer.

Danial

Danial, an 8-year-old Malaysian male, is the elder of two siblings. He has been referred to the child psychiatry clinic by a school counsellor who noticed new and old scars and bruises on his arms. Hidden by his long pants were numerous marks due to lashings with a *rotan*, a long pliant cane.

Danial's Chinese mother was formerly a Taoist. His father is a Muslim of Malay ethnicity. The parents fell in love while working together in a supermarket. Their marriage was accepted reluctantly by the conservative maternal grandparents who said, "Why can't you find someone of your own kind? Now you have to convert to another religion to marry this man". His paternal grandparents are more accepting. The parents became traders in the night markets, selling trinkets and souvenirs. They shift daily from one market to another in their battered van, barely making ends meet. They take their children with them while they work as there is no one to babysit them.

While his parents work, Danial and his sister are expected to sit at a table and do their homework, draw or play. Sara, Danial's 7-yearold sister, completes everything by herself and then helps out in the stall. She can already calculate the correct change for customers. Danial has problems reading and writing. He confuses p's and q's, can barely write his name, and has difficulty with arithmetic. He is better with his hands and is much sought after by his sister and other children to repair toys. When his parents work he prefers to wander from stall to stall. He makes friends easily but always with younger children or teenagers who have him run errands. He was once seen smoking by his father who caned him. His parents compare Danial adversely with his sister.

His maternal grandparents blame the mother for ignoring their advice, when she was expecting Danial, not to visit a zoo (where she was frightened by a monkey). According to the grandparents' beliefs, that incident and his mother's marrying outside of her race had displeased the ancestors who had thus cursed Danial to behave like a monkey, never still.

At school, Danial is regarded as a naughty boy who cannot sit still. He is inattentive and at the bottom of the class. His physical education teacher says he excels in football and won a gold medal in the 100 meter dash. However, Danial does not share his problems, even with him.

Danial has many friends among the younger children but few of his own age. He is often reprimanded by teachers for cutting queues, butting in when others are talking, and not taking turns at games. Danial hits other children when he is unhappy with them but he sometimes gives them items filched from his parents' stall.

Danial accompanies his parents to the clinic. He is small and thin for his age, below the fiftieth percentile for height and weight. He is wearing an old, dirty school uniform and has holes in his shoes. He is not pale and does not have dysmorphic features. The general physical examination is normal. At first his eye contact is poor. He fidgets in his seat and is reluctant to say anything bad about his parents saying that is against family rules. However, when he realizes that the therapist wants to help him, he breaks down and weeps. He says he has been sad, angry and jealous for a long time but trying not to feel that way. He admits to having problems sleeping. He sometimes wakes up screaming when he has nightmares of being hit by his father. He has felt irritable over the last year, especially when he is ridiculed for not being able to read and write. He thinks of killing himself but doesn't know how. He enjoys athletics and looks up to the sportsmaster who is the only teacher who says kind things to him.

Danial admits that his father and mother beat him frequently when he loses or breaks things, or when he disappears from the stall when they are working. They never explain why they beat him. He has felt unhappy for as long as he can remember, and thinks nobody loves him. His maternal grandparents say he is like a monkey. He thinks his parents don't love him as they compare him with his sister and ask, "Why can't you be like her?". His parents rarely do nice, enjoyable things with him. They bought him a football for his last birthday but it was confiscated by his father when he broke a window. For festive seasons like Aid Mubarak, which he celebrated with his paternal grandparents, or Chinese New Year, which he celebrated with his maternal grandparents, he received only one set of new clothes whilst his sister was given several outfits by relatives. He often thinks of running away but does not know where to go.

When interviewed, his parents admit they hit him at least once a week. They regard this as the Asian way of disciplining children. They were both brought up by strict parents. Danial's father reveals that he himself had problems sitting still and focussing on schoolwork. He still does not read or write well. This was one of the reasons he fell in love with his wife: she accepts him as he is and does the accounts and paperwork for their business. Danial was an "accident". The parents had to get married quickly to hide the fact that he was conceived out of wedlock (which would have been a serious problem for the grandparents on both sides). They insist they love Danial but his misadventures stress them, especially as they are struggling to make ends meet. They do not think he has problems other than naughtiness and disobedience.

MODEL ANSWER

Compare your management plan with the one suggested here. Keep in mind that the model answer is not the only way of dealing with Danial's problems. There may be other means of taking care of them depending for example on the availability of services, access to medication, cultural issues, or local circumstances. The model answer is provided as a guide for discussion of the issues that may need to be addressed.

PROVISIONAL DIAGNOSTIC FORMULATION

The categorical provisional diagnoses (according to DSM-5) are:

- Attention-deficit hyperactivity disorder (ADHD)
- Possible specific learning disorder (with impairment in written expression and arithmetic) (SLD)
- Possible borderline or low-average intellectual functioning
- Depressive disorder: dysthymia.

Intelligence and educational testing are required to rule in or out SLD and intellectual disability. He may have SLD alone, intellectual disability alone, or a combination of the two.

Danial's inattention, hyperactivity, impulsiveness, and learning problems are probably innate. The combination of inattentiveness, hyperactivity and learning disorder have caused academic failure and low self esteem. His self esteem has been further eroded as a result of the coerciveness, overpunitiveness, and rejection of his overstressed parents, and by his maternal grandparents' "folk" personifications of him as a monkey and their belief he was cursed.

Without treatment, the prognosis is poor. There are risks of suicide or juvenile delinquency if he is further alienated from his family. Much depends on whether the school can be mobilized to provide educational evaluation and remedial teaching. The clinician's capacity to engage and support the parents is crucial. Their attitude to discipline should not be criticized. Rather, alternative approaches to child-rearing should be gently encouraged on the basis that punishment alone has not worked. The parents are more likely to cooperate if stimulant medication is rapidly effective. The promotion of Danial's practical skills and athletic ability will help to compensate for his low self esteem.

Investigations

- Paediatric examination of his short stature
- Intelligence testing
- Educational testing (to clarify the existence and extent of specific learning disability)

TREATMENT PLAN

Danial is an 8-year-old boy, the older of two siblings born to a couple of mixed Chinese and Malay parents. His mother converted from Taoism to father's religion of Islam before marriage.

Pattern

Danial presents with the following symptoms and signs:

- Short, underweight
- Scruffy
- Poor eye contact
- Fidgety
- Won't sit still in school
- Inattentive
- Possible perceptual immaturity
- Breaks things, cuts queues, butts in, doesn't take turns in conversation
- Doesn't mix well with peers
- Keeps his problems to himself
- Thinks his parents don't love him because he is bad
- Feels disfavoured
- Thinks of running away or suicide
- Hits peers or gives them presents
- Steals from parents
- Insomnia and nightmares of being beaten
- Sad, angry, jealous

Predisposing problems

- Premarital pregnancy forcing early marriage
- Mixed marriage opposed by maternal grandparents
- Father inattentive and hyperactive in school with problems of literacy and numeracy (possible ADHD and learning disorder, suggesting a genetic predisposition)

Precipitating/perpetuating problems

- Poverty
- Stressful parental work situation
- Excessive physical discipline by both parents, especially father (justified by parents as the cultural norm)
- Coercive child rearing
- Compared unfavourably by parents to younger sister
- Folk explanations by grandparents ("monkey" identification and punishment for mixed marriage)
- Poor school performance
- Lack of friends

Potentials

- Repairs toys
- Athletic ability
- Good relationship with sportsmaster.

Target problems/potentials

- 1. Inattention/hyperactivity/ impulsiveness
- 2. Learning problems
- 3. Educational support
- 4. Coercive child rearing
- 5. Dysthymia
- 6. Athletic and practical ability

TREATMENT GOALS

1. Improve attention, activity level and impulse control

- Education of teachers (school conference)
- Education of parents (parental counselling)
- Stimulant medication, preferably long-acting (medication should have a beneficial effect within two weeks to one month).

2. Remediate learning problems

• Remedial education for specific learning disorder (this will take six months to two years)

3. Provide educational support

• Education of school staff (teachers, school counsellor, sportsmaster, principal) at school conferences about the nature of ADHD, SLD, and the need to promote potentials. Monthly school conferences will be required for six to twelve months

4. Improve quality of parental child-rearing and discipline

- Parental counselling
- *Triple-P* Positive Parenting Program* or other form of parent education to improve their parenting style and reduce coercive practices
- Possible education of maternal grandparents in similar positive practices
- These interventions will probably require six months to one year.

*Triple P – Positive Parenting Program® is one of the many parenting and family support programs available to prevent as well as treat behavioural and emotional problems in children and teenagers drawing on social learning, cognitive behavioural and developmental theory.

5. **Reverse dysthymia**

- Parental education and counselling about ADHD, SLD, and child-rearing techniques
- Support from school counsellor
- Promotion of potentials
- These interventions will probably require six months to one year

6. **Promote potentials**

- Enlist support of sportsmaster and school to promote athletic ability
- Enlist support of father to promote practical skills
- These interventions will probably take 12 months.

TREATMENT MONITORING

Goals 1,2,3 (attention, impulsivity, learning problems)

- Monthly school telephone contact or conference
- Regular parental interviews (weekly for 3-6 months, less frequently thereafter)

Goal 4 (child rearing and discipline)

• Parental report (weekly for 3-6 months)

Goal 5 (dysthymia)

- Mental status examination (weekly for 3-6 months)
- Parental report (weekly for 3-6 months)
- The Strength & Difficulties Questionnaire (SDQ, Malay Version) administered monthly for 3-6 months)

Goal 6 (potentials)

• Parental report (weekly for 6 months, less frequently thereafter)

TREATMENT CONTINGENCIES

- If intelligence/educational testing and remedial education are not available, the clinician should proceed on the basis that Danial has both ADHD and SLD.
- If possible, the mother and paternal grandparents should be enlisted to teach Danial to read and calculate, but they must be encouraged to be patient. Hopefully, the parents will be less coercive if stimulant medication has a rapid benefit. However, they should be warned that it may take time to find the right dose of the right medication.
- If *Triple-P* or similar program is not available, the clinician should include its principles in regular parental counselling.
- Consultation with and education of the school staff are essential. The clinician should work to enlist the support of the sportsmaster. It is possible that the father could be enlisted to teach Danial practical skills.
- Regular administration of the DSQ will help to monitor progress.