Research in medical clinical reasoning has traditionally explored a linear path from symptom to diagnosis. These linear models are learned in the undergraduate setting and are often appropriate and sufficient in the early hospital years. In general practice however, registrars face difficult situations with a high degree of uncertainty for which their existing models of clinical reasoning are inadequate. Typically, these situations involve a complex mix of chronic illness, psychosocial issues and challenges in the doctor-patient relationship. This article discusses alternative models of deconstructing the complex clinical encounter.

In the varied topography of professional practice, there is a high hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research based theory and technique. In the swampy lowland, messy confusing problems defy technical solution. The irony of the situation is that... in the swamp lie the problems of greatest human concern.¹

General practice has always dealt with uncertainty. For patients such as Jenny there are many theories and practical approaches developed in general practice.²³ Many focus on managing the patient for whom the diagnosis is unclear. General practitioners will use different approaches, and patients will respond to these in idiosyncratic ways.⁴ For the registrar, it is important to articulate the repertoire of options to enable them to provide flexible care that responds to the needs, preferences and readiness of the patient.

The following theoretical approaches represent different points of view. There are many ways of seeing Jenny, and each framework will give us different information and different lines of inquiry. Some will be comfortable and familiar to you and your patient; others may challenge your preferred viewpoint and may be more difficult to implement in your practice. Patients may reject some points of view and respond to others. For this reason, I have presented multiple frameworks to allow you to adapt to the unique challenges of each doctor, patient and illness combination.

It is hoped that supervisors will use this approach to help registrars find their way when a particular trail through the ‘swampy lowland’ comes to a dead end.

**Traditional clinical method**

‘Illness is what you have when you go to the doctor; disease is what you have when you’ve seen the doctor.’⁵

The term ‘traditional clinical method’ refers to a particular school of thought that arose in ancient Greece and formed the basis of modern diagnostics, particularly in the tertiary setting. There has always been a tension in medical diagnostics between the focus on the individual suffering the disease, and the classification of the disease as an independent entity. In ancient Greece, these two schools of thought were represented by the Coans and the Cnidians.⁶⁷ For the Cnidian school, the purpose of diagnosis was to classify the patient’s illness according to a taxonomy of disease. As McWhinney writes, this method did two
important things: ‘It provided the clinician with a clear injunction: conduct the clinical inquiry in this way and you will either arrive at a diagnosis or exclude organic pathology. Second, it provided clear criteria for validation: the pathologist told the clinician whether he or she was right or wrong’.5

Undergraduate diagnostic method is based on the Cnidian approach. Students take histories, examine, and draw diagnostic conclusions that then suggest management directions. Therapy is based on the classification of disease. As the novice becomes more expert, they may use different methods of clinical reasoning within this approach. These include hypothetico-deductive reasoning and pattern recognition6 but the basis remains the same. Observation guides diagnosis and diagnosis drives management.

For Jenny, and patients like her, there may be an answer using this method. It is not unusual for a senior colleague to draw together symptoms, signs and investigations and make the diagnostic conclusion that has eluded a registrar. An example may be the patient with nonspecific abdominal pain who has a diagnosis of shingles, or the patient with arthritis and rash who is diagnosed with Ross River fever. For the registrar and supervisor, these cases are relatively straightforward: the learning involves identifying clinical indicators and deductive reasoning processes, and the patient is usually relieved to have a concrete diagnosis. The registrar strengthens and extends their knowledge framework and reinforces their understanding of this type of clinical reasoning.

**Murtagh’s model**

‘Fatigue may indicate the first subtle manifestation of a serious physical disease or, more commonly, may represent a patient’s struggle to cope with the problems of every day life’.3

For many registrars, there is a fear of what one might miss. When symptoms and signs are subtle, and investigations are negative, it is easy to have a vague disquiet about the patient without a framework for defining or quantifying the risk. It is not uncommon for a symptom, such as fatigue, to represent a spectrum of disorder from serious physical illness to mild psychological distress. Murtagh offers a model of probabilistic reasoning specific to general practice that outlines common diagnoses seen in a given presentation. He then defines the ‘serious disorders not to be missed’, ‘pitfalls’ and the ‘seven masquerades checklist’ for the commonest presentations in general practice.10

His model extends the focus of traditional clinical method, providing a way for clinicians to undertake their own safety netting. For the registrar who orders a raft of investigations ‘just in case’, the use of the Murtagh model provides a structured way of identifying the ‘serious disorders not to be missed’. The supervisor can use the model to draw the registrar’s attention back to cues in the history and examination, and clarify the registrar’s differential diagnosis. This can then prevent the registrar using investigations to treat their own uncertainty.

For Jenny, with ill defined joint pain, it is important to exclude the common masquerades (such as depression and diabetes). Working through the serious disorders not to be missed and the pitfalls in a methodical way may reveal a diagnosis, or give the registrar confidence in a different understanding of the patient’s illness.

**The Balint approach**

‘By far the most frequently used drug in general practice [is] the doctor himself’.11

In the 1960s, Balint pioneered the work of deconstructing the general practice consultation. As a psychoanalyst, he identified the power and the risk inherent in the doctor-patient relationship, and began a program of workshops to help GPs understand and apply ‘the drug doctor’ in their consultations. Since then, a number of writers have expanded our understanding of the role and function of the doctor-patient relationship.12–14 Part of this work has involved developing the idea of patient centeredness: the idea that diagnosis and management are not independent of the patient, but are negotiated so that the patient is a powerful player in their own health care.5

For patients such as Jenny, this approach can yield vital information. It is not uncommon for the registrar (or the supervisor) to have strong feelings of failure, and an equally strong negative association with a patient. Balint’s model helps us to recognise this reality, and think about the causes and consequences of these emotional states.

For Jenny, there may be a shared sense of frustration and overwhelming helplessness. Balint would describe her as presenting ‘offers of illness’ (joint aches, nonspecific abdominal pain, headache) that are repeatedly rejected by the medical team, leaving her without a framework for her undifferentiated distress.

For the supervisor, it is important to identify a clash of expectations. Registrars early in the general practice experience may not see that they have a role managing a patient who has no obvious diagnosis. The patient may perceive the registrar as uncaring and uninterested in their obvious suffering. Moving forward may involve developing a shared understanding of the problem and shifting to a biopsychosocial formulation of her illness rather than searching for an elusive diagnosis. Recognising the shared sense of frustration is also an important step in this process.

**Lifestyle issues**

‘Lifestyle risk factors are common among general practice patients. Around half are overweight or obese, one in 5 smoke, one in 5 engage in risky drinking, and about two-thirds do less than the recommended level of physical activity’.15

The current focus on lifestyle risk factors is not just important for disease prevention. Patients such as Jenny will often present with nonspecific symptoms exacerbated by unhealthy lifestyle choices. There is a strong link for instance, between physical activity and emotional wellbeing.16 It is often helpful to investigate unhealthy behaviours such as smoking, drinking excessive alcohol, poor nutrition, low levels of physical activity and chronic stress. Negotiating a change in behaviour may effect symptomatic improvement and successful change will also improve the patient’s self efficacy: their sense of being able to change and exert some influence over their own health. For the registrar, this means extending their role from diagnostican to facilitator, managing the impact of illness even in the absence of known disease.

**Somatisation**

‘For many patients (and some health workers) the suggestion that a symptom is psychological implies that it is not real and that they must be lying or imagining it. A potentially acrimonious and embarrassing confrontation is often avoided by further investigations and specialist referral’.17

Somatisation means that psychosocial factors are involved in the development or continuation of a physical disease process.18 If we understand that physical illness can be caused by psychosocial stressors as well as physical agents,
then somatisation is essentially the physical expression of an organism under psychosocial stress. While some people express distress emotionally through feelings and words, others tend to express it physically. For many patients, this includes an inability to express emotion in words (alexithymia).

Remember that an alexithymic doctor and an alexithymic patient are a bad match: collusion with the somatisation can easily occur. Abnormal illness behaviour (the way the illness is communicated) combines with abnormal treatment behaviour (the way the health system prioritises physical disease). ‘Chronic somatisers have often embarked on a career of hospital attendances, admissions and investigations to exclude disease that might account for their symptoms. How this process begins and is maintained therefore depends also on doctors’.19

For patients such as Jenny, there needs to be acknowledgment that emotional factors are affecting her. Many patients will present with a mixed picture of anxiety, depression, and somatoform illness, and abnormal illness behaviour including excessive concern for their health. Jenny will need a thorough assessment of her mental health and treatment of any underlying disorder. Treatment of the somatoform elements requires education, reassurance and acknowledgment from both the doctor and the patient that there is an underlying emotional element to her symptoms. Reattribution, the technique of attributing symptoms to an emotional rather than physical cause, is the cornerstone of management. Some patients will resist this and persist in their belief that their symptoms have a physical cause (eg. headache attributed to ‘migraine’ rather than occupational stress). The chronic somatiser requires similar treatment to the patient who persists with an unhealthy lifestyle: empathy, understanding, education and support. Keep trying to broaden the agenda of the consultation to include psychological and well as physical concerns.20

**Syndromes**

‘In some cases, the giving of a name, such as chronic fatigue syndrome, is helpful and brings some relief. In many others it does not.’18

For many patients such as Jenny, there will be a label that will partly explain their symptoms. Clarke18 defines these syndromes as the ‘enigmatic syndromes’ a cluster of descriptors such as chronic fatigue syndrome, irritable bowel syndrome and fibromyalgia. These syndromes are complex, and the evidence to support physical and psychological aetiology is mixed. For some patients, there is value in obtaining support with other patients who share this cluster of symptoms. For some doctors and patients there is value in following existing guidelines for the management of their syndrome. Most patients who use these frameworks will seek support from a multidisciplinary team, and this in itself may help to broaden the agenda for those who also tend to somatise. For the registrar, it introduces a model of team care that is a common and important element across the discipline of general practice.

**Conclusion**

Registrars have spent many years developing their clinical reasoning skills in the tertiary setting. Many have sophisticated techniques for classifying disease processes and a broad understanding of evidence based medicine. The shift to primary care brings with it a significant paradigm shift. For the supervisor, there is a need to support the registrar when they feel frustrated, overwhelmed and inadequate in the face of uncertainty. The models detailed in this article are tools for the supervisor to help guide the registrar through the swampy lowlands of general practice.

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