Being a botanist and a gardener: using diagnostic frameworks in general practice patients with medically unexplained symptoms

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Abstract. Patients with multiple medically unexplained symptoms commonly seek treatment in primary care. Many of these patients seem to have a psychological ‘core’ to their illness that affects the way they experience, conceptualise and communicate their distress. There is considerable debate around diagnosis for this group of patients. Existing diagnoses include somatoform disorders in psychiatry and functional disorders in the medical specialties. Some clinicians use the term ‘heartsink’ patients, which reflects the interpersonal frustration inherent in some therapeutic relationships. A good diagnosis should be clinically useful, helping clinicians and patients understand and manage illness. Diagnosis should also provide a reliable classification for research and evidence-based treatment. The allegory of the botanist and the gardener has been used to describe diagnosis. For the botanist, a good diagnosis produces a taxonomy that is rigorous and reliable. For the gardener, it informs the way a garden is described and understood in a specific context. Clinicians need both: a ‘botanical’ type of classification to bring rigour to research and therapy, and clinical ‘gardening’, which allows for multiple perspectives and diagnostic frameworks. Clinical reasoning is a form of research with therapeutic intent. Botany and gardening represent a mixed-methods approach that can enrich diagnosis. The challenge is to integrate multiple perspectives in clinically helpful ways that help us retain both richness and rigour.

Additional keywords: chronic illness, diagnosis, mental health, somatoform disorders.

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Marie is a 47-year-old woman who attends my general practice frequently for symptoms including headache, non-specific pelvic pain and intermittent diarrhoea. She is obese, asthmatic and has a history of chronic fatigue syndrome, which she manages with diet and complementary therapy.

Marie has disclosed a history of childhood sexual abuse. Recently, she left her husband, a violent alcoholic. She has tried counselling but has found this unhelpful as it raised issues that ‘just made me feel worse’. It was also expensive, and Marie struggles to manage the family finances.

Marie takes an antidepressant, which seems to help her cope with the multiple stressors and losses of her life. She is considering applying for disability benefits as she is too ill to sustain a job.

I try again to make a diagnosis. She fulfils the criteria for depression, but denies feeling depressed: ‘just overwhelmed’. She also fulfils the criteria for somatoform disorder, but I worry that this diagnosis may lead other health professionals to ‘not take her seriously’. Through previous referrals to various specialists she has acquired several individual diagnoses, such as irritable bowel syndrome, tension headache and fibromyalgia.

I think Marie is overwhelmed by trauma, both past and present, and doesn’t have the resources and support she needs to address these issues. Unfortunately, ‘there is no modernist clinical category for ‘living a life of overwhelming trouble and suffering’ ’ (Frank 1997). I continue to help her with a supportive therapeutic relationship and limited intervention for her symptoms, but I wonder if there is an evidence-based treatment for her. It seems unlikely: without a diagnosis, how can I research, evaluate and apply an evidence base?

Introduction

Disease is what the practitioners have been trained to see through the theoretical lenses of their particular form of practice (Kleinman 1988).

The Diagnostic and Statistical Manual of Psychiatric Disorders (DSM) has been subjected to sustained criticism (Box 1). Critics assert that psychiatric symptoms are not real in the same way that a broken leg is real and therefore naturalist classifications are not appropriate. They argue that classification systems like the DSM are socially constructed, inherently misogynistic, culturally biased and entrench existing social power structures. They claim that psychiatrists benefit from the ‘medicalising of misery’ (Kleinman 2007; Ussher 2010). They also argue that a psychiatric diagnosis stigmatises the most vulnerable members of our society while offering dubious therapeutic benefit.
Box 1. How real are psychiatric disorders? Common criticisms of the Diagnostic and Statistical Manual of Psychiatric Disorders (DSM) classification system

Criticisms centre around the use of the DSM to diagnose mental disorder according to sociocultural attributes rather than objective criteria (Radden 2009).

The Feminist critique

The DSM uses gendered norms and terms (Horwitz 2002) such that women are inherently more likely to be considered ‘disordered’. This latent misogyny is clearly shown when classifying victims of childhood trauma. As Robertson writes: ‘the individual, usually male, impacted by a circumscribed traumatic event, whose response is characterised by the features of the diagnostic category of acute PTSD [post-traumatic stress disorder], is viewed with compassion by psychiatry. In contrast, the person, usually female, who suffers prolonged interpersonal violence, whose psychological distress does not accord with the PTSD paradigm, is labelled ‘borderline’, with all the attendant therapeutic nihilism that follows’ (Robertson and Walter 2007, p. 794).

The cross-cultural critique

The DSM classification pathologises cultural difference (Robertson and Walter 2007). Writers such as Kleinman (1995) have highlighted the cultural entailments of the DSM and this has ethical consequences for treatment (Sadler 2005).

The modernist critique

The DSM assumes that there is a clear distinction between the mind and body, and that both can be known objectively. However, many writers highlight the ambiguous relationship between the self and mental illness (Sadler 2004; Robertson and Walter 2007). To avoid this dilemma, the authors of the DSM tried to operationalise diagnostic criteria, and focus on observable behaviour. However, this eliminated reference to the subjective quality of the experience. The lack of reference to the quality of the lived experience has led some psychiatrists to question the validity of these diagnoses. ‘Neither the criteria used nor the diagnostic entities they define get close to the essence of the phenomena with which they are concerned’ (Kraus 2003, p. 204).

The philosophical critique

The DSM privileges reliability over validity. Positivist definitions aim for reliability, and this can lead to ‘treating what is vague as if it were precise’ (Birley 1990, p. 117). For instance, most diagnoses are based on behavioural criteria that are seen to be objective. However many writers have criticised the circular reasoning that this entails (Gorenstein 1992). As Salmon writes ‘the evidence for the disease is the symptoms, which are then said to be explained by the disease’ (Salmon 2007, p. 246).

The social critique

The DSM entrenches existing social power structures, shifting the experience of sadness and distress into the realm of a disorder. Writers such as Foucault have criticised the process of psychiatric diagnosis, describing its effect as silencing the mentally disturbed and ‘cutting off the discourse between reason and madness’ (Foucault 1965). There is no doubt that diagnosis carries social consequences, such as stigma, access to social goods such as insurance (Robertson and Walter 2007) and the potential for the restriction of personal liberty. As Fulford (2009) writes, psychiatric diagnosis is stretched between the medical and the moral.

These criticisms are particularly obvious in patients with multiple medically unexplained symptoms. Recent frameworks have emphasised observable behaviours, such as the symptom count of somatisation disorder (American Psychiatric Association 1994), but for clinicians the classification of these clusters of medically unexplained symptoms is difficult. There is a difference between applying a reliable scientific taxonomy and making a diagnosis that is clinically useful.

Sadler describes this difference using the allegory of a botanist and a gardener. He says there is a difference between ‘the goals of science for knowledge’ sake, versus the goal of knowledge for patients’ sake’ (Sadler 2005). For the botanist, classification produces a taxonomy that is rigorous and reliable. For the gardener, classification informs the way a garden is developed and nurtured in a specific context. In this paper, I examine multiple medically unexplained symptoms, and the dilemmas inherent in making a diagnosis. I explore the strengths and weaknesses of ‘botanical’ classification and the advantages and disadvantages of ‘gardening’ in clinical practice. Finally I discuss integrating these types of understanding when approaching patients like Marie in the primary care setting.

What are medically unexplained symptoms and do they represent an important disorder in primary care?

Medically unexplained symptoms are common (Kroenke and Mangelsdorf 1989). Estimates of prevalence are complicated by the methodological difficulties inherent in defining ‘medically unexplained symptoms’, ‘somatisation’, or ‘somatic symptoms’, but prevalence is estimated to be between 20 and 75% (Katon et al. 1984; Gureje et al. 1997; Smith and Dwamina 2007; Clarke et al. 2008).

Many medically unexplained symptoms resolve spontaneously or with simple reassurance (Jackson and Passamonti 2005). However, some patients have multiple and disabling symptoms that persist and remain medically unexplained. Many of these patients have significant disability and require complex care (Escobar et al. 1998; Fink et al. 1999; Smith et al. 2002). Many have co-morbid medical and psychiatric disorders (Brown et al. 1990; Katon et al. 2001; Toft et al. 2005). Most are women (Deary 1999). Poor relationships with doctors are common (Garcia-Campayo et al. 1998; Hartz et al. 2000; Wileman et al. 2002; Salmon 2007). In primary care, these patients are often described as ‘heartsink’ (Jewell 1988; Rosendal et al. 2005), difficult, or even hateful (Groves 1978).

Patients with medically unexplained symptoms are recognised as a cluster in primary care, but many writers question whether these patients fit within a psychiatric taxonomy.

Several diagnoses in DSM IV could classify these patients. The most obvious is somatisation disorder. However, this diagnosis is problematic. There are no psychological symptoms specified within this disorder: the diagnosis is based on having several unexplained physical symptoms — and yet a psychiatric aetiology is implied by its inclusion in the DSM. This lack of a psychiatric core restricts the clinician’s ability to understand aetiology and craft explanations and it offers little in the way of therapeutic benefit. ‘As a concept, somatisation disorder emerges as an entity with an identifiable boundary but no core. Because the basis on which it is recognised is divorced from any reference to psychological dysfunction, clinicians may learn how to apply it without learning how to think with it’ (Mace 2002).
Considering botany

*If psychiatric diagnosis is so flawed, why make a diagnosis at all? Could medically unexplained symptoms also be psychiatrically unexplained?*

The purpose of diagnosis is to maximise clinical benefit. According to Sadler (2005) a good diagnosis achieves five main goals:

- **Diagnosis should give a simple characterisation** of a phenomenon – an ‘aetiological shorthand’ capturing what is known about the causative factors and progress of a disease.
- **Diagnosis should involve ongoing reinterpretation.** There should be a co-constructed approach between doctor and patient towards diagnosis leading to clinically appropriate and evidence-based treatment. Diagnosis should help a clinician and patient come to a common understanding of ‘what is going on’.
- **Diagnosis should forge clinical understanding and moral purpose into therapeutic action.** It should be clinically helpful.
- **Diagnosis should respect the patient, not just because it is morally right, but because it creates an effective therapeutic alliance.**
- **Diagnosis should be faithful.** A faithful diagnosis creates a valid interpretation of the patient’s experience. ‘Diagnosis should be rigorous, accountable, thorough and consistent – faithful to the ‘data’, to the patient, to the context, to procedure’ (Sadler 2005).

The somatoform disorder categories in DSM provide a way of understanding and explaining ‘the tendency to experience, conceptualise and communicate mental states and distress as physical symptoms and altered body states’ (Singh 1998). They encourage clinicians to look beyond medically unexplained symptoms, and create a broader biopsychosocial interpretation of a patient’s distress. For patients like Marie, this respects her ongoing psychosocial trauma, and is more consistent with her experience than either a diagnosis of a pure physical complaint (e.g. irritable bowel syndrome) or a pure psychiatric complaint (e.g. depression).

The aetiology of somatization disorder is unclear. Several studies highlight abnormalities of neurological functioning in patients with unexplained symptoms. The idea that pain and somato-sensory systems may be sensitised by physical, cognitive and emotional stimuli is supported by research utilising functional magnetic resonance imaging (Petrou *et al.* 2008). Patients with functional syndromes show evidence of increased blood flow to areas that attend to symptoms. We may understand more about Marie’s suffering if we see her continued pain as evidence of a hypersensitive neurological system: i.e. pain causes anxiety and distress, anxiety and distress contributes to hypersensitivity of the pain pathways, hypersensitivity leads to further pain. Loeser and Melzack (1999) describe this process as learning within the ‘pain neuromatrix’. This aetiological understanding may provide a basis for research into treatment options.

A somatisation disorder diagnosis incorporates physical and psychological elements. Without a framework that recognises these dual elements, there is a high iatrogenic risk for patients with medically unexplained symptoms. Patients can suffer from unnecessary investigations and treatment while their illness concern and health behaviour are ignored (Rosendal *et al.* 2005). A workable diagnostic framework must balance and respect the physical and psychological elements of the illness.

**The botanical diagnosis as a gateway for services and support**

There is evidence that treatment in patients with multiple medically unexplained symptoms is effective; the diagnosis can lead to therapy. A systematic review of 96 randomised controlled trials showed that antidepressants have a moderate effect across all functional syndromes (O’Malley *et al.* 1999). Another systematic review showed a modest improvement with cognitive behavioural therapy (CBT) (Kroenke and Swindle 2000). There is also evidence for supportive therapy (Smith *et al.* 2005).

Much of our health system is predicated on diagnosis. In Australia, patients with a disorder can access funded psychological services, where a patient with undifferentiated psychological distress cannot (Australian Government Department of Health and Ageing 2011). A diagnosis also brings the potential to connect with others who share similar experience. It can lead to advocacy for these patients, which drives research funding and evidence-based guidelines. As Broyard (1992) writes: ‘Nobody wants an anonymous illness’.

The alternative, to recast Marie’s experience into a series of functional disorders (irritable bowel syndrome, tension headache) can lead to an endless, frustrating and clinically unhelpful search for physical syndromes we can explain, with the risk of multiple diagnoses and an uncoordinated approach to treatment. Labelling a patient with the term ‘heartsink’ encourages premature closure, denying the clinician the opportunity to understand their subjective experience.

**What are the negative consequences of diagnosis?**

There is always the risk of oversimplifying, and creating ‘distorted semblances, caricatures of the original phenomena’ that are dangerous and misleading (Sadler 2005). Many would argue this is the key issue with the symptom count within the DSM diagnosis of somatisation disorder.

Psychiatric diagnosis carries with it several consequences for the patient, many of which affect their social power and agency (Sadler 2004). There has been fierce professional and public debate about the role of stigma and the power of psychiatry to treat or restrict liberty in those it defines as mentally disordered (Szasz 1974). Patients often describe battling for legitimacy: they feel their symptoms are seen as less real than those with a physical diagnosis (Salmon 2007). At worst, they are seen as the disease: they become heartsink patients.

Equally worrying is the way the diagnosis is applied unevenly across the population. DSM describes mental disorder as a set of internal dysfunctions, and excludes culturally expected responses to psychosocial circumstances. However, it is difficult to define the difference between an environmental stress that causes a ‘breakdown in an internal mechanism’ versus a natural, culturally expected response (Wakefield 1992, 1997) unless we revert to sociocultural norms. If we look at a shared traumatic event, such as a bushfire, a diagnosis of post-traumatic stress disorder requires clinical judgment: which symptoms (nightmares,
flashbacks, duration of grief) indicate a ‘natural, culturally expected response’ and which indicate a ‘failure of an internal mechanism’? The equivalent in somatoform disorders is deciding when ‘physical complaints or resulting impairment exceeds that expected’.

The social element in diagnosis means that certain groups are more likely to be seen as disordered than others. Somatisation is common in developing countries (Goldberg et al. 2002) and among victims of childhood trauma (Radden 2009). Applying a botanic label that situates the disorder within an individual can minimise the impact of trauma. What does it mean when a victim of childhood trauma is seen as diseased rather than traumatised? Do we see Marie differently if she ‘suffers from somatisation disorder’ than if she is ‘a survivor of childhood abuse’?

**Considering gardening**

*How is a clinician like a gardener?*

A garden is not simply a collection of botanical specimens in a defined space. There are other ways of understanding, describing and working with a garden just as there are multiple ways of knowing a patient. Different perspectives influence not only the therapeutic choices, but also how Marie conceptualises her distress and seeks help.

Master gardeners and garden architects have different methods and focus (Figs 1, 2). A formal Japanese garden requires different methods from an English cottage garden. Each garden has different features, plants and aesthetics. Not all Japanese gardens are identical, but they share a common core. Sadler (2005) would describe this as a simple characterisation of a phenomenon.

Table 1 outlines the parallels between the gardener and the clinician, and shows the tension between classification and clinical utility. The botanist and gardener make different ontological assumptions: there is a difference between observable symptoms and the experience of suffering.

**What do gardeners bring to the diagnostic process?**

A single view of mental disorder is inadequate. ‘Mental disorders, after all, are conditions that disturb a person’s unique self – a self that is at once biological, storied, encultured, social–political and existential’ (Sadler 2005). Some writers have proposed using multiple perspectives on diagnosis, rather than expecting a single framework to be comprehensive. This includes phenomenological perspectives to enhance our understanding of subjective symptoms (Kraus 2003), and narrative approaches to respect a patient’s lived experience (Jordens and Little 2004; Nettleton et al. 2004).

One helpful diagnostic framework involves understanding health anxiety and abnormal illness behaviour. Somatisation has been described as a disorder of perception (patients experience more symptoms), conceptualisation (they attribute those symptoms to a serious physical disorder) and illness behaviour (they seek more medical help). This health anxiety cycle in patients may be reinforced and exacerbated by the doctors’ concern about missing a disease (Williamson et al. 1981).

While it is not clear what constitutes ‘normal illness behaviour’, patients with multiple medically unexplained symptoms share some unhelpful cognitive and behavioural patterns (Kennedy et al. 2009). Recognising and addressing these patterns, and constructing more helpful alternatives, are the core strategies in CBT. CBT addresses both cognitions (health anxiety) and behaviours (help-seeking and illness behaviours) and has been shown to be effective (McCabe 2005; Smith et al. 2006). These insights help with the interpretation of symptoms,
the identification of coping strategies and the avoidance of inappropriate reinforcement.

Some writers have suggested that symptoms may develop from conditioned reflexes, established during early trauma experiences (Dwamena et al. 2009). When physical and emotional suffering, fear and shame are clustered together in early childhood, it is understandable that stimuli in adulthood can trigger a wave of other associated symptoms and why functional disorders often follow a history of childhood abuse (Katon et al. 2001; Fiddler et al. 2004).

Different perspectives acknowledge the complexity of the presentation and allow the clinician to co-construct understanding with their patients. Using ‘medically unexplained symptoms’ as a diagnostic term ‘brings honest ignorance to the forefront and states simply that there is a number of symptoms and syndromes that present as phenomena for which health professionals at present can find no medical cause. Medically unexplained symptoms are mysterious with respect to their etiologies’ (Deary 1999).

Are there limitations to gardening?

The core criticism of using multiple perspectives in the diagnostic process is the difficulty it creates in evaluating treatment effectiveness. The Australian Psychological Society (2010) recognised this challenge in their recent review of evidence-based psychological interventions. They stress the importance of therapist interpersonal skills and client characteristics in determining treatment outcomes. Researching these areas requires different methods—‘the psychotherapeutic experience cannot be captured in randomised controlled trials’ (Australian Psychological Society 2010).

Fortunately, there are constructivist qualitative research methods that have been applied to medically unexplained symptoms. These include grounded theory (Charmaz 1990), ethnography (Karp 1992) and phenomenology (Råheim and Håland 2006). However, these approaches are only beginning to build evidence for alternative diagnostic frameworks.

There are also difficulties integrating multiple perspectives clinically. McHugh and Slavney (1998) recognise this difficulty with reference to Engel’s biopsychosocial approach. They write that ‘this systems approach is so broad in its scope and so non-specific in its relation to any particular disorder ... it can do no more that remind psychiatrists to look at everything’. By applying eclectic approaches, the clinician can lose the simple characterisation a diagnosis offers.

Crafting a good clinical diagnosis for patients with multiple medically unexplained symptoms

The work of the botanist

Clinicians need good diagnostic frameworks to manage this cluster of patients and develop evidence-based guidelines. The Conceptual Issues in Somatoform and Similar Disorders group have identified several key questions that need to be addressed to develop a cluster of useful diagnoses in DSM V (Creed 2006; De Gucht and Maes 2006; Hillel 2006; Levenson 2006; Sykes 2006). Their key goals include:

- Creating a palatable and clinically useful term to describe somatoform disorders and somatisation behaviours. In other words, creating a good diagnosis.
- Deciding whether these disorders fit best within a psychiatric classification system. In essence, they question whether these patients are mentally disordered or physically unwell with a background of psychosocial trauma or ongoing stress.
- If these diagnoses are to fit within the psychiatric classification system, deciding whether they remain in Axis 1 as a clinical syndrome, Axis 2 as a personality disorder or Axis 3 as a physical disorder.

<table>
<thead>
<tr>
<th>The gardener</th>
<th>The clinician</th>
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<tbody>
<tr>
<td>Has a good working knowledge of botany and the way each plant grows and thrives.</td>
<td>Has a good working knowledge of diagnostic classification and evidence-based treatment.</td>
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<tr>
<td>Understands the context, considering the environment of the garden itself but also each plant in relation to others.</td>
<td>Understands the psychosocial and cultural context of their patient and the roles their patients play within that environment. Marie is a single mother with dependent children. She is unemployed and lacks social support. She also lives in a world where stigma around mental illness is expected.</td>
</tr>
<tr>
<td>Considers the aesthetics of the garden and its purpose, in consultation with the owner of the garden.</td>
<td>Considers and evaluates the goals of therapy. A good clinician will work with Marie to determine what constitutes a good clinical outcome. This understanding is shared between the clinician and the patient: the consultation is ‘patient-centred’ (McWhinney 2003).</td>
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<td>Utilises skills, some of which can be articulated and some of which are now instinctive skills learned through experience. Donald Schon describes this as ‘knowledge-in-action’ – the ability to perform a skill effectively without necessarily being able to describe what one is doing (Schon 1983).</td>
<td>Utilises consultation skills to create and maintain a positive therapeutic partnership. The effectiveness of Marie’s treatment will depend on the quality of these interactions and relations (Horwitz 2002).</td>
</tr>
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<td>Has a range of theoretical approaches, skills and techniques. Some of these are known to all good gardeners, others reflect a particular shared understanding of good practice. A particular gardener may apply elements from various master gardeners and adapt them to their own context, purpose and aesthetic.</td>
<td>Has a range of theoretical frameworks, drawn from psychological and psychiatric theories and approaches. Some, such as supportive therapy, are common to all good clinicians. Others reflect a particular orientation or way of working. These frameworks are negotiated – reflecting the preferences and characteristics of both clinician and patient.</td>
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<tr>
<td>Can recognise when individual plants or whole gardens are sick and will implement strategies to correct this.</td>
<td>Can assess functional limitations and manage the impact of these limitations on a patient’s ability to cope. Supporting coping is a core skill for the primary care clinician (Lazarus and Folkman 1984).</td>
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• Deciding whether to use symptom count as the key diagnostic feature of the disorder, and if so, deciding how many symptoms are needed to define the disorder (Kroenke et al. 2007).

Even though the current approaches to classifying medically unexplained symptoms are flawed, the concepts are important. Without a language to describe the clinical dilemmas involved in treating patients with medically unexplained symptoms, the clinician is unable to manage symptoms. As Dixon (1986) writes: ‘the family physician at a loss for words is also at a loss for hypotheses and risks being left empty-headed as well as empty-handed’. Researchers also need to define the field to investigate the neurobiological and psychosocial aetiology of the condition and assess therapeutic approaches.

The work of the gardeners

‘A clinician is not someone whose prime function is to diagnose or to cure illness. A clinician is more accurately defined as one whose prime function is to manage a sick person for the purpose of alleviating most effectively the total impact of illness upon that person’ (Tumulty 1973). For Marie, that includes managing the ethical and other consequences of the diagnosis and the diagnostic process.

As clinicians, we have a responsibility to contribute to the debate around diagnosis, and test the work of the botanists in the garden environment. We also need to find other ways to describe, research and understand this important area of human suffering.

Conclusion

Clinical reasoning is a form of research with therapeutic intent. This research utilises different methods, each with their own ontological and epistemological perspectives. Like any mixed-method research, each brings different perspectives to the clinical encounter, which may not be easily integrated or synthesised.

An ethical approach to diagnosis in a patient with medically unexplained symptoms requires us to recognise the limitations of narrow psychiatric classification. The clinician needs to craft a broader diagnosis that can be used to direct therapy. This includes ensuring that health care services and appropriate treatment are available regardless of whether or not we have a neat diagnosis. Close collaboration between the botanists and the gardeners is needed to craft clinically helpful diagnostic frameworks in this challenging area of practice.

Conflicts of interest

None declared.

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