



Somatisation: demystifying the “ghost in the machine”

Somatisation is a maladaptive functioning of an organ system, without underlying tissue or organ damage, or where the symptoms are disproportionate to the underlying structural cause. It occurs as a result of complex psychosocial factors, and symptoms are not under voluntary control. Somatisation should be considered as part of the differential diagnosis from the first consultation. Helping patients understand the concept of somatisation and ensuring they do not feel dismissed or stigmatised by the diagnosis is an important element of the management strategy, which also focuses on patient self-awareness and cognitive techniques.

KEY PRACTICE POINTS:

- Somatisation refers to the contribution psychosocial factors make to a patient’s bodily symptoms; including where an underlying pathology is absent or when symptoms are disproportionate to the underlying or original cause.
- The symptoms caused by somatisation can be wide-ranging and affect any organ system
- It may be appropriate to consider somatisation at the first consultation when a patient’s symptoms cannot be readily explained by an identifiable disease
- Some patients will be resistant to the idea that psychosocial factors may be making them unwell, others will be more accepting and may have already thought about these factors as a reason for their symptoms
- Empathy, normalisation and understandable explanations will help to break down any stigma and become an essential part of the management of somatisation



Full audio commentary on this topic by Associate Professor Hamish Wilson from the Department of General Practice and Rural Health, Dunedin School of Medicine, University of Otago, and co-author of “Being a Doctor” is available from: www.bpac.org.nz/2019/somatisation.aspx

The following article is a summary of this presentation; all quotes are from Associate Professor Wilson.

“Most of us were not taught about these illnesses in medical school, so it is not surprising that we can find it hard to identify the problem, or offer practice advice to patients. It’s a bit like learning medicine in English, but then some patients seem to be speaking in a different language”

Just what is somatisation?

There are multiple definitions in the literature for somatisation, however, they all generally refer to the concept that psychosocial distress can produce physical or “bodily symptoms”.^{1,2}

Somatisation usually refers to symptoms that may occur in the absence of organic pathology, however, it can also be used in a broader form to describe situations where there is underlying structural pathology that is affected significantly by psychological factors. For some people the symptoms are disproportionate to the underlying or original cause, e.g. a minor injury that appears to be the precipitating factor for a chronic regional pain syndrome. It is thought that in the absence of structural pathology, the symptoms are caused by maladaptive neurophysiological pathways that are not under voluntary control.³ An analogy that can be used here is that the symptoms relate to a software problem rather than being an issue with the hardware itself.

“These symptoms and syndromes can be quite complex; they also vary widely from patient to patient. Unfortunately, they are poorly conceptualised within the medical model, which makes life difficult for both patients and us doctors”

We have probably all experienced somatisation as it occurs almost every day to some degree. That feeling of butterflies in your stomach before a presentation, your heart racing when you are nervous or the way your stomach churns when you are anxious or upset. We think of these effects as an accepted way that our bodies work and do not attribute much significance to them. In some cases, however, the somatising symptoms that are experienced become established and persistent and are so concerning to the person that they seek medical advice, often in primary care.⁴

“These symptoms are very common. In primary care and in specialist clinics, symptoms that cannot be explained by a readily recognised disease account for 10-20% of all consultations”

The terminology around somatisation

Somatisation is one of many interchangeable terms, e.g. functional illness, somatic illness, functional somatic syndrome, somatic symptom disorder, bodily distress syndrome and medically unexplained symptoms. Whatever term is used, however, is of less consequence than what is happening for a particular person at that time and how the clinician responds to this. Therefore, the term “somatisation” itself is often not used when talking to patients. Phrases such as “mind-body connections” and “what’s going on in your life” are likely to be more beneficial.⁵

“My own preference is for functional illness, meaning that the problem is due to how an organ system is functioning...my preference is to not use ‘medically unexplained symptoms’ as a label, as this is more of a research term than a clinical one; and it doesn’t say what the problem actually is, only...what is not...and most patients are really wanting an explanation, they don’t want us to say it is unexplained”

Uncertainty is a feature of somatisation

Symptoms consistent with somatisation are often vague, transitory, involve multiple sites or systems and do not fit well with symptoms and signs of recognised conditions. Examinations may yield little information and investigations can produce confusing results. All of these features bring an element of uncertainty into the consultation. This can generate frustration for both patient and clinician, lead to repeated consultations and often many unneeded investigations.

“When these sorts of symptoms remain mysterious, both patients and their doctors can feel frustrated and helpless, which can be quite difficult to handle... often leading to lots more consultations and multiple tests, which in turn, can cause more anxiety and expense and as well can turn up incidental findings or false positive result.”

However, managing uncertainty is one of the specialities of general practice.¹ Considering somatisation as a differential diagnosis may reveal a cause of symptoms right from the first consultation, or, it may take considerably more time to unravel the psychosocial factors in the patient’s life that are causing it.²

“So it is possible to make a positive diagnosis at the first presentation, although not every time of course”

Patients with somatisation often have complex histories

Some people are more prone to developing persistent physical reactions to psychosocial distress than others and are also more worried about what these symptoms might mean. A simple explanation is that they might be “wired differently” or that they may have a heightened sense of anxiety compared to other people. We all experience anxiety but at very different levels. It is our response to anything that we consider threatening or worrying. The trouble is that although we might logically understand that nothing bad will happen our response to the situation can be out of proportion to this. In addition to this, people with persistent somatising symptoms also tend to have a hypervigilance towards physical symptoms and are more inclined to worry or catastrophise when thinking about the cause or outcome of these symptoms.⁴

There is some evidence from cross-sectional studies that certain characteristics are more likely to be associated with people who have somatisation, including:⁴

- A history of anxiety or depression
- Female gender
- Limited education
- Lower socioeconomic status
- Recent stressful life events
- A history of physical or sexual abuse
- A history of chronic illness as a child or a parent with chronic illness

“Some personality types do seem to be more at risk of such illnesses (e.g. [those with] anxiety, obsessiveness, over-analytical, excessive body scanning), but this is not true for all patients”

Somatisation can cause a wide array of symptoms

Somatisation can produce symptoms that manifest in any organ system and therefore can play a role in many types of presentations, such as:⁴

- Generalised symptoms, e.g. fatigue, dizziness, blackouts or collapse
- Gastrointestinal symptoms, e.g. nausea, vomiting, bloating, abdominal pain, diarrhoea
- Cardiorespiratory symptoms, e.g. palpitations, non-cardiac chest pain, shortness of breath
- Neurological symptoms, e.g. tingling, numbness, weakness, headaches, non-epileptic seizures
- Pain symptoms, e.g. headaches, joint or limb pain, back pain, abdominal or pelvic pain

“Importantly, these symptoms are not under voluntary control; they usually involve regional neuro-physiological pathways. Patients cannot stop these symptoms happening and once triggered, they are very difficult to turn off.”

Pain is the most common somatic symptom, and can include almost any type of pain, e.g. headache, back pain, abdominal pain, joint or limb pain.⁴ Fatigue, dizziness, gastrointestinal discomfort and sexual problems are also symptoms that are frequently encountered in primary care that may be caused by somatisation,⁴ although virtually any symptom may have a somatic contribution. It is widely accepted that stress or stressful events can cause many conditions to worsen, e.g. acne, eczema, headache, oesophagitis, asthma and gastrointestinal problems.

“When people have a lot on their plate, then their fight-flight response is slightly on all the time and people are a bit ‘jumpy’; they are more likely to have bouts of their functional symptoms at such times”

How do you approach somatisation as a diagnosis?

The simple answer is to continue to use standard clinical reasoning as for any clinical problem. Start with the history, a physical examination, formulate a differential diagnosis, identify any urgent problems or red flags, request appropriate investigations and then begin management based on the most likely cause, whether or not this includes the possibility of somatisation as a diagnosis.⁵

“Ideally then, making a diagnosis... is not one of exclusion after all tests have been done. It is part of the normal differential diagnosis.”

Somatisation therefore becomes part of the differential diagnosis. The aim is for somatisation to be a positive diagnosis based on what features are there and not a negative diagnosis based on what is not there, i.e. not a diagnosis of exclusion.² If the usual biomedical model is followed and appropriate review is in place, a serious diagnosis will not be overlooked.² For example, if the presenting complaint is headache and you think that it might be due to somatisation, then in addition to asking about the patient’s day to day life and psychosocial factors, you would still check for red flags, examine the fundi and the cranial nerves or other clinical aspects as appropriate (and repeat these investigations if the patient represents).

If the patient has no urgent clinical needs, an appropriate strategy may be to use the “tincture of time” as this can avoid over-investigation which can be counter-productive, but this needs to be accompanied by a “safety net” involving:

- A clear explanation of the suspected cause of the symptoms
- Advice about other symptoms suggestive of a serious cause – including red flags
- Instructions about what to do if their condition deteriorates
- An arrangement for follow-up if the symptoms persist

“Some people’s symptoms may improve or even resolve with a simple well-timed explanation, but many require much more detailed explanations over several consultations...that time can be useful to learn more about the patient as a person, who they are, what sort of life and background they have had and so on”

The next step is to review the patient after an appropriate period of time, keeping an open mind as to the cause of the underlying problem, particularly if the patient is not getting better. With practice, the ability of the health professional to detect somatisation often improves and with it the confidence that when somatisation is suspected, the suspicion is likely to be correct.

“The most important thing is to consider functional illness [somatisation] at the same time as other diseases, and to try and rule it in and to rule it out, just in the same way as we do for all other possible disease categories”

Pattern recognition can help detect somatisation


When taking a history, it can be useful to look for patterns, both in the characteristics of the symptoms themselves and whether the symptoms can be grouped into a recognised clinical pattern (see below).


“There are usually quite a few clues and these illnesses usually have a pattern to them, just like other disease like heart failure or asthma have particular patterns”

Characteristics that may increase the probability of somatisation include:²

- Physical symptoms that are accompanied by psychological symptoms
- A stressful event that may have precipitated the symptoms and alleviation of the stress resulted in improvement of the symptoms
- Physical symptoms which do not fit the typical presentation of an organic disease e.g. paraesthesia and weakness in the hand that does not match the typical findings in carpal tunnel syndrome
- Multiple symptoms in different organ systems that do not seem to tie together
- A history of similar episodes of bodily symptoms
- Symptoms that do not respond to standard medical treatments

Pattern recognition can also be useful to group somatic symptoms to identify a number of conditions that are referred to as functional somatic syndromes, such as fibromyalgia, chronic fatigue syndrome and irritable bowel syndrome.⁴ The underlying cause of these conditions is not well understood, however, each has well-recognised presenting features that are used to formulate a diagnosis, e.g. the ROME III criteria for irritable bowel syndrome. All of these conditions are associated to some degree with psychosocial stressors such as anxiety, depression, stressful life events or a lower socioeconomic environment.⁴

 Further information on irritable bowel syndrome is available from “Irritable bowel syndrome in adults: Not just a gut feeling” www.bpac.org.nz/BPJ/2014/February/ibs.aspx

 A recent paper by Mr John Dunbar and Dr Hamish Wilson outlines the management of a patient with chronic regional pain syndrome and describes how the mind-body connection and patient self-management

enabled a successful outcome to be achieved: Dunbar J, Wilson H. Emerging models for successful treatment of complex regional pain syndrome in children and young adults. *J Prim Health Care* 2019;11:283–7.

Clues in the patient’s history

In addition to outlining the presenting complaint and checking for red flags that might suggest underlying pathology, clues from the history can provide valuable insight into the patient’s previous illness experiences and their current life circumstances.

“...quite often the patient has a previous history of similar symptoms or others that were not explained; it’s very useful to ask them what they thought of those bouts in retrospect, as this gives you some clues about their own internal explanations and personal styles”

Four questions are recommended, of which question one is the most important:^{2,5}

1. “What was going on in your life around the time the symptom started?”
Symptom onset corresponding with a significant life event is consistent with somatisation. However, a frequent answer will be “not much”, which then means you need to ask again, e.g., “There may not have been much going on but can you tell me what was happening?” and when listening to the answer, it may become apparent that there was not one major stressor but two or three smaller ones having a cumulative effect.
2. “Is your symptom ever related to pressure, responsibility or relationship challenges?”
Symptoms caused by somatisation are generally worse at these times. The terms used in this question are preferred to the term “stress” to reduce the negative implications associated with this word, i.e. that the person is not coping.
3. “Are there times when the symptom seems to be better or goes away entirely?”
Symptoms caused by somatisation are usually absent during the night, first thing in the morning (immediately upon waking) and improve with recreational activity, exercise, on weekends or during holidays
4. “Are there times when the symptom is more likely or always present?”
This question is included as an opposite of question three. If a symptom invariably coincides with an external event the two are likely to be linked.

Empathic listening is key during these conversations so that the clinician can pick up on potential causes of the symptoms. In some cases, the patient may have their own theories and as the discussion proceeds, they may start to make clearer connections between their symptoms and recent life events. Being empathic also forms the basis of a trusting relationship between the patient and the clinician. However, it can be difficult to empathise when you are unsure or uneasy about the clinical situation and the risk is that the clinician will disconnect. The patient and clinician can both become defensive, antagonistic and confused resulting in an unsatisfactory consultation, e.g. if the patient is convinced they have a physical condition, but the clinician can find no physical signs to support this and is unable to convey the concept of somatisation as a cause to the patient.⁶ This has been described as a consultation that is “weighed down in hopelessness on both sides”⁶

“It is often very helpful to talk such patients over with colleagues or in a peer group... as this helps us to gain perspective and not to get too tied up in endless tests or blaming the patient; these actions are usually in response to not feeling so effective as usual”

How do you treat somatic symptoms?

1. The underlying aim is to normalise and destigmatise somatisation as a diagnosis
2. The process of diagnosis is itself an important part of the management strategy, by allowing patients to understand what has caused their symptoms
3. Once that understanding is reached, self-awareness, cognitive techniques, relaxation and reflection form the basis of treatment

Establishing a diagnosis of somatisation is likely to also assist in the management of the condition because while discussing the patient’s symptoms and taking an in-depth history, links can be made and conveyed to the patient that helps them begin to understand how psychosocial aspects of their life could be causing the symptoms. These discussions therefore can often have therapeutic value in themselves.


“Some patients are correctly thinking along these lines anyway and all they are wanting is for us to confirm their own suspicions”

Most people do realise that at some point they have responded in a physical way to the pressure and strains of modern life and they accept that this is normal. Normalising somatisation in a similar way prevents the patient from thinking that they are being told they are “making it up” or that it is “all in their head”.^{2,7} Some patients, however, may find this a difficult idea to grasp. In cases where somatisation is suspected but you sense the patient is not “getting it”, some limited self-disclosure

from the clinician can assist with ensuring patients understand that it is a normal process, e.g. “We all get physical symptoms with stress” followed with “I usually get... headaches/an upset stomach ... and some people get what you have”⁵

If patients feel stigmatised by being diagnosed with somatisation the risk is that they think they are not being taken seriously, that they are not a “good” patient and that it is actually “all in their head”.^{6,7} Patients may request unnecessary investigations or referrals or disengage with primary care and seek other options to manage their health, often at increased financial cost, and miss the chance for the problem to be addressed early with a better prognosis.⁷

“Different explanations are needed for different sorts of patients. These include 1. The brainstem and its role, 2. The fight-flight response in the modern world, which includes instinctive responses and the physiology of feelings, and 3. The emotional links between mind and body.”

 For an in-depth discussion of these three concepts by Associate Professor Wilson, refer to the audio link.

Make the connections without “blaming”

Clinicians need to be mindful that if a patient has symptoms due to somatisation that it does not imply that they are unable to cope, or that they are weak or in some way deficient.²

“Some patients with chronic or ongoing symptoms can feel quite isolated and marginalised and may have felt judged or criticised by others; so we do need to tread carefully”

Differences in personality, experience, cultural background and beliefs can all contribute to the varying ways that individual patients respond to any illness, trauma and stressors. The use of statements that connect the patient’s symptoms to current life events becomes part of the process of transition in their understanding and helps avoid any perception of inadequacy.² One suggestion is to use a statement such as “These sorts of symptoms are often connected to what’s going on in a person’s life” followed by “If there is a connection, this doesn’t necessarily mean you’re not coping”.⁵ Using easily understandable explanations that illustrate the mind-body connections can assist with this process.

“Metaphors are useful. In chronic pain for example, the incoming signals are over-reacted to by the brainstem. It is a bit like having a house 10 metres from a railway line, where initially, it sounds like the train is about to crash into the living room...but over time, as you trust that the train will stay on the tracks, the noise of the train seems less and after more time, you don’t hear it at all.”

Some experts recommend avoiding the use of the word stress, as this may imply that the patient is not coping.^{2,8} Try using words such as pressure, busyness, responsibility or relationship challenges instead of stress or use similar words to those that the patient has used during the consultation.^{2,5}

In situations where there seem to be no current major life stressors, patients may struggle to understand how they can still have physical symptoms.^{2,8} "Triggering" describes the concept where relatively minor day-to-day life stressors can generate symptoms that may have originally developed in response to a more major event or series of events in the

past that has now resolved.² Other health events can also be triggers such as injuries, infections and operations, although it is important to explain that the symptoms are not directly related to any structural damage from the trigger itself.⁸

"Remind patients that having bouts of symptoms means their body and their organs are structurally ok and functioning just fine for most of the time. Bouts of symptoms mean that at other times their internal body system controlling that organ is a bit off balance, or over-reacting in some way"

A summary of management for patients with somatisation

The art of managing patients with somatisation lies in encouraging the patient to consider the possibility that external stressors or emotional distress may be playing a role in their symptoms.¹¹ It is then usually possible to suggest individualised management strategies that allow the patient to self-manage their condition.

"You need to engage and reassure, to validate the patient's experience and to offer your commitment to providing ongoing support and treatment"

Patients with a high level of self-awareness who are open to these discussions often respond well to this approach.¹² Those with a less developed sense of self-awareness, who struggle to acknowledge that there might be a connection between external factors and how their body functions, are likely to be less receptive.¹²

"... the task is one of 'holding' the patient, in other words, that you don't investigate further, [you] get to know the patient as a person over time, and then you can gradually educate about what is going on. It sounds easier of course than it is in practice."

The steps in management might follow an approach such as this:⁵

1. Listen and empathise – this becomes part of the management as well as an essential part of the work-up
2. Offer understandable explanations – this also becomes a management tool as often once the connections are made the symptoms improve

3. Address any specific fears – "Is my headache due to a brain tumour?" "Are the chemicals at work making me sick?". Address the concern, explain what you have done to check that this is not the cause and if required put a safety net in place.
4. Always reinforce the benefits of a healthy lifestyle – the simple things like eating and sleeping well, getting enough exercise, enough fluids, having a holiday or a break from a difficult situation
5. Manage any associated conditions such as hyperventilation, anxiety and panic attacks or depression. Approximately 50% of people with somatising symptoms will have an underlying mood disorder¹³
6. Take the time to talk things through. Although the consultation will be longer, in the long run there will be savings of time and resources and a better prognosis.⁵ If required, provide links to online resources or referral for counselling, cognitive behavioural therapy or a pain clinic.
7. Encourage the patient to try mindfulness and relaxation techniques or meditation
8. In a few cases, temporary use of medicines may be useful, e.g. a few days of lorazepam to be used as needed for panic, paracetamol or a low dose of a tricyclic antidepressant at night for pain

"Symptomatic relief is better than an escalating ladder of pain medications."

Patient self-care is one of the most important parts of management

The majority of symptoms that may be attributable to somatisation will resolve naturally over time.⁹ All patients, however, will benefit from regular exercise and improvements in nutrition, fluid intake and sleep quality.¹⁰ In patients where a dysfunctional “fight-flight” response may be contributing to their symptoms, breathing techniques, mindfulness and relaxation may be helpful.

“[The] patterns of increase and reduction in symptoms illustrate the importance of the parasympathetic system, the one that damps down the fight-flight response. Once patients have been told about this system, then they can more readily accept the rationale for rest, relaxation, quiet walks, meditation and so on.”


Psychological issues that may be contributing to the patient’s symptoms should also be addressed, e.g. anxiety, depression, relationship issues or a history of abuse or trauma. These patients may benefit from cognitive behavioural therapy.¹⁰ This counselling technique may also be beneficial to patients who pay excessive attention to their bodily symptoms, causing them to report more symptoms and for symptoms to persist.¹⁰


Visualisation may be helpful for patients with chronic pain. The concept of how the brain controls every part of the body can be used to help the patient develop visualisation

techniques to retrain their nervous system and block the afferent input that is functioning inappropriately. For example, visualising the afferent nerve as a hose of water and mentally turning off the water supply to the hose whenever the pain is felt.

“It is extraordinarily satisfying to help these patients identify links between their symptoms and their lives. This usually results in an easing of the illness and reduction in health-care costs.”¹²

Further resources

 Dr Brett Mann presents a complementary perspective on somatisation in a Goodfellow Unit webinar, “Somatisation in a 15 minute consultation”, available from: www.goodfellowunit.org/events/somatisation-15-minute-consultation

 A New Zealand-based learning tool and self-help pathway for patients by Professor Brian Broom is available from: www.wholeperson.healthcare/illness-explorer



This article is available online at:
www.bpac.org.nz/2019/somatisation.aspx

References

1. Pimlott N. Managing uncertainty. *Can Fam Physician* 2007;53:1000.
2. Mann B, Wilson H. Diagnosing somatisation in adults in the first consultation: moving beyond diagnosis by exclusion. *Br J Gen Pract* 2013;63:607–8. doi:10.3399/bjgp13X674602
3. Henningsen P, Fink P, Hausteiner-Wiehle C, et al. Chpt 2: Terminology, classification and concepts. In: *Medically unexplained symptoms, somatisation and bodily distress: developing better clinical services*. Cambridge, United Kingdom: : Cambridge University Press 2011. 43–68. <https://pdfs.semanticscholar.org/a606/f9bb63a117eea1a1147af546e91e7e1e502c.pdf> (Accessed Sep, 2019)
4. Creed F, Barsky A, Leiknes KA. Chpt 1: Epidemiology: prevalence, causes and consequences. In: *Medically unexplained symptoms, somatisation and bodily distress: developing better clinical services*. Cambridge, United Kingdom: : Cambridge University Press 2011. 3–16. <https://pdfs.semanticscholar.org/a606/f9bb63a117eea1a1147af546e91e7e1e502c.pdf> (Accessed Sep, 2019)
5. Mann B. Somatisation in a 15 minute consultation. <https://www.goodfellowunit.org/events/somatisation-15-minute-consultation>
6. Stone L. Blame, shame and hopelessness: medically unexplained symptoms and the ‘heartsink’ experience. *Aust Fam Physician* 2014;43:191–5.
7. Burke MJ. ‘It’s All in Your Head’-Medicine’s Silent Epidemic. *JAMA Neurol* Published Online First: 16 September 2019. doi:10.1001/jamaneurol.2019.3043
8. Cock HR, Edwards MJ. Functional neurological disorders: acute presentations and management. *Clin Med (Lond)* 2018;18:414–7. doi:10.7861/clinmedicine.18-5-414
9. General Practice Supervisors Australia. Managing uncertainty in General Practice. 2017. http://gpsupervisorsaustralia.org.au/wp-content/uploads/2017/04/Guide_Managing-Uncertainty_Digital.pdf (Accessed Jul, 2019)
10. Creed F, van der Felt-Cornelis C, Guthrie E, et al. Chpt 8: Identification, assessment and treatment of individual patients. In: *Medically unexplained symptoms, somatisation and bodily distress*. Cambridge, United Kingdom: : Cambridge University Press 2011. 175–209. <https://pdfs.semanticscholar.org/a606/f9bb63a117eea1a1147af546e91e7e1e502c.pdf> (Accessed Sep, 2019)
11. Creed F, Kroenke K, Henningsen P. Chpt 3: Evidence-based treatment. In: *Medically unexplained symptoms, somatisation and bodily distress: developing better clinical services*. Cambridge, United Kingdom: : Cambridge University Press 2011. 69–96. <https://pdfs.semanticscholar.org/a606/f9bb63a117eea1a1147af546e91e7e1e502c.pdf> (Accessed Sep, 2019)
12. Wilson H, Cunnigham W. *Being a doctor: Understanding medical practice*. Dunedin: : Otago University Press 2013.
13. Croicu C, Chwastiak L, Katon W. Approach to the patient with multiple somatic symptoms. *Med Clin N Am* 2014;98:1079–95.