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The treatment of patients with medically unexplained symptoms in primary care: a review of the literature

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ABSTRACT

Medically unexplained symptoms (MUS) are among the most common and frustrating in primary care. Our goal was to review published evidence to guide busy general practitioners working with a culturally diverse, challenging patient population coping with MUS. A search of PubMed and PsycINFO from 1985 to the present was conducted using MUS and related terms.

The literature was then organised into sub-categories based on its relevance to primary care. We conclude with a description of gaps in the literature based on the literature review and the clinical experience of the authors.

Keywords: general practice, medically unexplained symptoms, primary care

Introduction

Laura is a 42-year-old cosmetics salesperson with a nine-month history of recurrent abdominal pains, nausea and vomiting, for which she has sought help from a variety of doctors in a variety of settings. During the nine months of her illness she has consulted her general practitioner on 24 occasions, has seen a gastroenterologist on two occasions and a psychiatrist on one occasion, none of whom, despite repeated investigations, can find an explanation for her symptoms. Laura is suffering from medically unexplained symptoms.

General practitioners (GPs) are familiar with the puzzling and clinically demanding dilemma of medically unexplained symptoms (MUS), which is captured in the vignette above. Ten of the most common problems with which adult patients present in primary care (chest pain, fatigue, dizziness, headache, swelling, back pain, shortness of breath, insomnia, abdominal pain and numbness) account for 40% of all visits, but primary care doctors can identify a biological cause for the concern in only

26% of these patients.¹ Additional studies from around the world have found that between 25% and 50% of primary care patients present with MUS, which makes this the most common category of complaints in primary care.^{2–5} Because the majority of patients with MUS do not complete a referral to mental health services,⁶ the burden of caring for these patients usually falls on GPs. The treatment of patients with MUS can be both challenging and frustrating for busy GPs and their concerned patients.

The label clinicians should attach to patients presenting with these medical mysteries has been the subject of much debate. Part of the reason for this is evidence that suggests MUS exists on a continuum of severity, ranging from patients with transient, mild symptoms to those with multiple, debilitating unexplained symptoms.⁷ Nomenclature for patients with severe MUS in the DSM-IV-TR includes several categories for MUS, including somatisation disorder, conversion disorder and pain disorder.⁸ The criteria have been criticised as cumbersome, difficult to use and too restrictive to be useful in general practice.⁹ Interestingly, a study of secondary care attenders' case notes found that physicians were able to reliably agree on the recognition of MUS.¹⁰ Another study found that family physicians demonstrate a high level of accuracy in subjectively recognising MUS, without the aid of standardised assessments.¹¹ Although a definition for MUS that meets everyone's needs is elusive, doctors appear to recognise them reliably when they present.

While some have advocated for more precision in the identification of MUS,⁷ others believe that specific classifications are insufficient because they do not match the nebulous physical and psychological ailments presented by patients in primary care.^{12–14} Rather than discuss MUS as a specific disorder, we are taking an inclusive approach by exploring it as a clinical and social predicament that includes a broad spectrum of presentations where there is difficulty in accounting for symptoms based on known pathology.^{5,15} Such an approach may allow GPs to avoid the challenge of choosing either an organic or a psychological explanation for MUS and instead enables comprehensive, biopsychosocial treatment that addresses both hypotheses simultaneously.¹⁶

The inclusive definition of MUS guided our literature search, which was carried out to identify studies related to the treatment of MUS in primary care settings. A search of PubMed and PsycINFO from 1985 to the present was conducted using the following keywords: 'medically unexplained symptoms', 'somatisation' or 'somatoform disorder' combined with 'primary care' or 'secondary care'. Potential studies were also identified from the bibliographies

of retrieved articles, several systematic reviews and literature already known to us. All information was restricted to sources published in English and was obtained from peer reviewed journals and edited books. We excluded studies focused on children and adolescents. Although the focus of this review is on effective treatment interventions in primary care, we begin with a brief overview of patient characteristics and the doctor–patient relationship, and conclude with a discussion of family and cultural considerations and gaps in the literature.

Characteristics of patients with MUS

Patients with MUS are heterogeneous, but they share some characteristics. When compared with other chronically ill patients, MUS patients report lower quality of life, comparable or greater impairment of physical function, poorer perceived general health and worse mental health.¹⁷ MUS has been linked with disorders of affect regulation, specifically alexithymia, which is a personality construct characterised by a difficulty in identifying feelings and distinguishing between feelings and bodily sensations, difficulty describing feelings and an externally focused cognitive style.^{18–20} A meta-analysis found a small to moderate relationship between alexithymia and somatisation, with difficulty in identifying feelings showing the strongest association with somatic symptom reports.¹⁹ A study in Holland found an association between somatisation and alexithymia in a large, national representative sample; the association was independent of the most common mental health disorders and sociodemographic factors.²¹ While other studies have not found alexithymia and MUS to be significantly related,^{11,22} there is enough evidence to suggest that alexithymia is an important area to assess with MUS patients.

The disabilities associated with MUS have an economic cost: patients with MUS take more sick leave and have higher rates of unemployment.^{23–25} In addition, MUS patients generate higher health-care costs as a result of increased use of diagnostic tests, and have longer visits to doctors when compared with other patients.^{17,26–28} One study estimated that the total aggregate cost of somatisation among working adults in England, including health care use and disability, is nearly £18 billion per year.²⁹

A qualitative study that sought to understand high utilising primary care patients with MUS found three patterns of perceptions and behaviours:³⁰

- 1 coping high utilisers achieve success in their lives and have a degree of psychological insight. They

neither focus on their symptoms nor display significant health anxiety. They are not afraid of having undiagnosed terminal disease, but they want explanations for their symptoms

- 2 classic high utilisers persevere on their vague symptoms, demonstrate little psychological insight and/or express strong entitlement that they should be excused from normal social obligations
- 3 worried high utilisers demonstrate high health anxiety and become angry and complain about their health care when they perceive resistance to their expectations and demands.

A common thread among all three groups was that they had current or past family dysfunction. This is consistent with other research which has found that a history of trauma or abuse is associated with MUS.³¹⁻³⁴

The doctor–patient relationship and MUS

The patient characteristics described above undoubtedly impact on the doctor–patient relationship. When doctors are unable to provide a clear diagnosis for their discomfort, patients can feel discounted and misunderstood.^{35,36} Patients across cultures are most satisfied with their care when primary care doctors share their model of understanding of the presenting problems and treatment options.³⁷

Like patients, doctors also experience MUS as difficult and frustrating.³⁸ GP frustration is tied to a range of negative emotions, including feelings of inadequacy, resentment and a fear of patients who may manipulate the course of treatment.³⁹ GPs recognise the importance of adequately explaining MUS but often feel incapable of doing so clearly or feel they have little power to influence their patients' understanding of their illness.^{39,40} A study of GPs found they try to reassure patients in non-specific ways by telling them there is no disease, using metaphors and normalising the symptoms.⁴⁰ A study of patients with MUS also found that reassurance and normalisation, such as suggesting that negative test results means nothing is wrong, is the most common explanation for MUS, which patients experience as rejection of their symptoms.³⁵

Physician and patient frustration is partly attributable to misunderstanding due to poor communication. Contrary to the common belief that MUS patients ignore the psychological aspects of their illness, research has shown MUS patients commonly

offer clues about underlying concerns.⁴¹ MUS patients want more emotional support from GPs in comparison to other patients and will openly discuss their psychological symptoms, if asked.^{33,42-44}

In a study of patients consulting GPs, it was found that patients are transparent about wanting emotional support, but are much less direct about wanting explanation and guarded in their desire for physical intervention.⁴⁵ Doctors, who focus primarily on physical symptom relief,⁴⁶ frequently ignore these cues for emotional support.⁴² One study found that physicians encountering patients with MUS tend to demonstrate fewer patient-centred communication behaviours (e.g. responsiveness to patients' expressed concerns) in comparison to patients with straightforward symptoms, even though MUS visits are longer. In addition, physicians did not explore or validate the psychosocial concerns of MUS patients in comparison to patients with straightforward symptoms.⁴⁷ Validation and empathy from GPs toward their patients is associated with higher patient ratings of interpersonal care, particularly when there is ambiguity in the patient presentation.⁴⁸ All of these results have implications for the optimal treatment of MUS in primary care.

Treatment of MUS in primary care

Although GPs believe that patients with MUS should be managed in primary care, they perceive a dearth of effective strategies to treat these complex patients.¹⁰ GPs' beliefs about the lack of treatment guidance are consistent with the literature: there are few MUS treatment studies based in primary care. Almost all of the research on MUS treatment comes from secondary care settings. Rather than ignoring the secondary care literature, the full collection of MUS treatment literature was reviewed with the following question: what is in the primary, secondary and tertiary care MUS treatment literature that could be useful to doctors in primary care?

Studies based in primary, secondary and tertiary care settings have repeatedly found that antidepressant medication, cognitive-behavioural therapy, hypnotherapy and other non-specific interventions (e.g. reattribution) are efficacious for the treatment of patients with MUS.⁴⁹⁻⁵¹ However, there are qualifications to these results. Most patients were studied after accepting referral for mental health treatment and these are only a fraction of all MUS patients.⁵² The number of patients not referred or who refused referral was usually not reported. In addition, patients

meeting criteria for somatisation disorder or health anxiety disorder (formerly hypochondriasis) were not always distinguished from other patients with MUS.

The rare randomised controlled trials based in primary care have shown that a multidimensional intervention that includes cognitive-behavioural, pharmacological and patient-centred management results in improved depression, higher satisfaction with doctors, an increase in antidepressant use and a decrease in use of addicting agents.^{53,54} A follow-up study found that the multidimensional intervention might also be cost effective.⁵⁵ The interventions described below include a variety of evidenced-based strategies that can be integrated to form a comprehensive treatment plan for patients with MUS.

Patient-centred care

Based on the literature reviewed above, doctors will benefit from strengthening the doctor-patient relationship by listening carefully to the patient's presentation, validating the variety of concerns through direct assertion that the symptoms are real, exploring cues about psychological concerns and responding to emotions. When a patient gives an emotional cue or directly expresses an emotion, the doctor works toward NURSING the emotion: Naming it, Understanding it, Respecting it, and Supporting it.⁵⁶ In addition, doctors should provide clear explanations that link psychological and physical processes. Rather than identifying symptoms as *either* physical or psychological, it may be more helpful to recognise symptoms as *both* physical and psychological.⁵⁷ Recall that a common but inadequate method used by doctors to explain MUS is reassurance and normalisation ('There is nothing wrong with you - all tests are normal'), which then leaves psychological factors as a last resort diagnosis. Although this is well intentioned, reassurance and normalisation with unclear explanation has been shown to be ineffective and may exacerbate symptoms.^{12,58,59}

Assessment as an intervention

A careful assessment by itself can have therapeutic effects and can lead to a change in patient beliefs about their illness.⁴⁹ Consistent with patient-centred care, it should also be noted that the non-specific but powerful effect of supportive listening alone can help a patient feel understood and may play a significant role. In addition, a good initial assessment can help the patient construct a clearer narrative and gain a fuller understanding of their pain and

fear.^{60,61} In sum, a thorough patient interview and brief psychological tests (e.g. PRIME MD) help form a good assessment.

A good example of an assessment as intervention is the PPP model,⁶² which considers three factors that may initiate or maintain the process of MUS:

- 1 predisposing factors, which can include chronic childhood illnesses, childhood maltreatment, chronic social stress and low social support
- 2 precipitating factors, which can include psychiatric disorder, social, fiscal, or occupational stress, changes in social support and change in routine
- 3 perpetuating factors, which can include decreased activity and weight gain, social isolation and decreased self-confidence.

Using the PPP model, the goals are to limit the damage of perpetuating factors, avoid new precipitating factors, and decrease the power of predisposing factors.

Reattribution

Reattribution is a patient-centred, structured intervention designed to provide patients with an explanation that links their physical symptoms to psychosocial issues. A primary goal is to alter unhelpful patient attributions for symptoms and to broaden patient attributions.⁶³ It has four stages:¹⁴

- 1 enabling the patient to feel understood
- 2 broadening the agenda beyond physical symptoms
- 3 making the link with psychosocial issues
- 4 negotiating further treatment.

A study of patient experiences with reattribution emphasised the importance of patients feeling understood and the desirability of continuity of care, which allows the GP and patient time to understand the complexity of the problem over a series of consultations.⁶⁴ The study also stated that it is essential for doctors to clearly communicate to patients that attention to psychosocial issues won't negate the need to be aware of physical disease. Reattribution training is viewed favourably by GPs and helps to positively change GPs' perceptions of patients with MUS, particularly in gaining greater understanding and confidence with their patients.⁶³ However, GPs trained in reattribution still find patients with MUS complicated and difficult to change.^{14,65} MUS patients also view reattribution favourably, but it appears that reattribution is no more effective than treatment as usual.^{66,67}

Medication

Antidepressants have been shown to be useful in the treatment of some cases of MUS – for those patients with MUS who suffer from dysthymia, major depression and for those patients with MUS whose mood symptoms have not reached the threshold for comorbid mood disorder. Those patients whose symptoms of MUS are associated with major depressive disorder have been shown to benefit from the use of antidepressants.^{68–72} The effect of antidepressants in such cases is twofold; independent improvement in the associated mood or anxiety symptoms and an improvement in the severity of pain. There is a lesser effect on other somatic complaints.

The above information underlines the importance for GPs of using screening tools and completing a mental state assessment in all cases of MUS in order to identify underlying depression and anxiety.¹⁵ A quick and easy method for carrying out a mental state examination in primary care is the Look, Listen and Test schema.⁷³ This schema utilises the observation and communication skills already possessed by GPs to enable the GP to develop a formulation by observing the patient's behaviour and activities from the moment they enter the consultation room, by listening to and evaluating the content of the speech to identify underlying themes of depression, anxiety or paranoia, and by encouraging GPs to test severity by using questionnaires developed to evaluate mood and anxiety disorders. Once depression has been diagnosed, the GP should prescribe the standard dose of selective serotonin reuptake inhibitors (SSRIs) or tricyclic antidepressants (TCAs) available in their geographical area of practice.

Those patients who suffer from MUS with comorbid mood symptoms that do not reach the threshold of a formal depressive disorder have also been shown to benefit from lower dose SSRIs or other antidepressant medications. The use of low dose antidepressants in such cases specifically targets symptoms of pain and insomnia.⁵⁶ Benzodiazepines have not been shown to be effective in the treatment of MUS and carry the attendant risks of addiction in this disabling and chronic disorder.⁶²

Psychological interventions

Patients with MUS who have comorbid mental health disorders, such as anxiety or depression, and those who have some form of psychological distress may need psychological support as part of their treatment. Below is an overview of psychological treatment for MUS, including:

- cognitive-behavioural therapy

- relaxation response, mindfulness and meditation
- group therapy
- brief dynamic psychotherapy.

With appropriate training and support, some of the interventions can be carried out by GPs. In more complex cases, GPs will benefit from collaborating with a mental health specialist, ideally co-located in the primary care setting.

Cognitive-behavioural therapy

Cognitive-behavioural therapy (CBT) has been by far the most extensively researched psychological intervention for MUS and related disorders. Randomised controlled trials involving between five and 20 CBT individual or group sessions provided by mental health clinicians have generally found a modest improvement in patients' symptom severity and other measures,^{74–76} though follow-up for longer than a year has been rare and usually psychological distress remains less affected than other variables. Recent meta-analyses and other review articles have confirmed these results in addition to discussing their clinical complexity.^{4,49–52,60,77–81}

The variability in therapeutic methods and patient characteristics, including age and diagnosis, does limit the applicability of CBT research findings, but there are certain common elements of the approach that are worthy of mention. In most trials, systematic relaxation training (often progressive muscle relaxation) is combined with psychoeducation and the discussion of dysfunctional beliefs. These latter two interventions are both aimed at the gradual education of patients, to help them come round to viewing their symptoms in more psychological and less catastrophic ways; in this sense, both psychoeducation and the treatment of dysfunctional beliefs can be considered as specific means to apply the patient-centred care and reattribution principles described above. As early as 1990, Klimes and associates gave a concise summary of the key point in their message to patients: 'we emphasized that while the pain was "real", it was not necessarily caused by serious organic pathology. It might result from, or be made worse by, excessive nervous and physical tension due to external stresses'.⁸²

A first major step is for the patient to begin to believe that his or her symptoms may not be caused by a grave illness. New coping skills need to be learned for the patient to live day-to-day with less alarmism and more comfort in the face of anxiety-provoking symptoms.⁷¹ This is the primary goal of relaxation techniques, the recognition and challenging of dysfunctional beliefs, coaching and peer support.

Another helpful CBT intervention is daily diaries. GPs can ask the patient keep a daily diary that can be reviewed with a clinician at each session.⁸³ In the diary, the patient lists symptoms along with accompanying feelings and thoughts. In reviewing these thoughts with the patient (for example, 'I am having a heart attack'), the clinician can offer benign alternative explanations ('I tense up and get chest wall muscle pain as result'). Along with a diary, the traditional CBT practice of homework assignments is usually recommended.

A more practical alternative to the typical 10–15 session CBT intervention, which may be unrealistic for the busy GP, is a single three to four hour CBT treatment that combines psychoeducation, relaxation techniques, a discussion of dysfunctional beliefs and the encouragement of physical activity to counter the avoidance of symptoms and activity. In a study of this intervention, in the six-month period following the single session, MUS patients reduced their visits to the GP by 50%.²³ Problem-solving therapy, another practical alternative, remains a promising method awaiting further study.⁴⁹

A sobering trend in the CBT literature is the fact that it has been difficult to replicate results when skilled mental health clinicians have not been the providers; in most cases, GPs taught a CBT approach have been no more effective than the control group of treatment as usual.⁸⁴ One study compared three mandatory and three optional half-hour CBT sessions to the same number of sessions offering structured care and found them equally helpful.⁸⁵ While this finding adds to the small body of literature questioning the specific efficacy of CBT as applied by GPs, and the authors regret they did not have a true 'treatment as usual' arm of the study, they suggest that to have such sessions scheduled with a single clinician and to combine it with diary-keeping, as was done, could offer a meaningful treatment itself. This is consistent with conclusions from many of the CBT researchers, who recommend a flexible, step-wise approach to caring for these patients.

Finally, a promising direction in the literature is the 'third wave' of CBT approaches like acceptance and commitment therapy,⁸⁶ dialectical behavioural therapy⁸⁷ and functional analytic psychotherapy,⁸⁸ which integrate mindfulness training and distress tolerance skills training with more traditional CBT techniques. In addition, several excellent workbooks distil CBT methods in a very accessible way and include CDs that allow simple downloading of handout pages.^{89,90} While most of these handouts do not directly apply to MUS per se, they facilitate the treatment of related anxiety, anger and mood disorders as well as relationship problems.

Relaxation response, mindfulness and meditation

Keefe and Blanchard demonstrated that six 30-minute weekly sessions instructing irritable bowel syndrome (IBS) patients in the relaxation response meditation developed by Herbert Benson gave immediate relief from problems caused by flatulence and bloating, and at three-month follow-up bloating and diarrhoea were also reduced.^{91,92} How widely these results might apply for other MUS patients or for other meditation techniques remains an open question, but the arena of meditation and mindfulness holds considerable potential in a comprehensive MUS treatment strategy.

Group therapy

Group therapy has been a helpful intervention for patients and families coping with a range of physical and psychological problems, including MUS. A randomised controlled study of an eight-session group therapy for patients with somatisation disorder found a significant increase in self-reported physical functioning and mental health as well as decreased healthcare utilisation and costs in the year during and following treatment.⁹³ Klimes and associates studied a four to 11 session CBT group on patients with non-cardiac chest pain and observed pain reduction along with other beneficial effects.⁷⁴ A considerable proportion of CBT interventions in the literature have involved a group format.

Brief dynamic psychotherapies

Although dynamic therapy has not been researched as extensively as CBT, it seems to yield comparable small to medium effects. Abbass and associates report a reduction of patient symptoms and repeat emergency department visits in the year following an intensive short-term dynamic psychotherapy that averaged four sessions (range of 1–25).⁵⁶ Several other studies have revealed similar data,⁴⁰ and Blanchard and Scharff cite a few such studies for IBS patients.⁶¹

Where trained mental health practitioners are available for referral and patients are motivated to see them, it is helpful to consider this option. It seems less likely that most GPs will undergo sufficient training to incorporate dynamic therapy techniques into their own clinical practice; the problems of learning effective CBT in a relatively brief period are compounded by the dynamic approach, whose language and applications are less accessible to the uninitiated. This situation may be changing for the better, with the recent advent of manualised dynamic treatments.

Different psychotherapeutic orientations may provide a more effective focus for some patients. For example, Maunder and Hunter propose a tension dynamic therapy based on attachment theory and existential death anxiety that has considerable humanistic appeal.⁹⁴ The motivated GP who does want to draw from the psychotherapeutic traditions will ideally find local allies in the mental health field who can serve at least as consultants, and ideally as close collaborators.

Collaborative care

Many of the treatments described in the previous section can be most effectively implemented through collaborative care. Collaborative care, which has been defined in a variety of ways by individuals and organisations around the world, is characterised by two or more healthcare professionals (e.g. GP, mental health specialist) who work closely with each other and patients and their family members to collaboratively define problems and jointly develop treatment goals and actions.⁹⁵⁻⁹⁸ Ideally, healthcare professionals are co-located in the same office and provide care to individuals during the same encounter.⁹⁸ Patients are much more likely to accept treatment provided as part of primary care than they are to accept referral to mental health care.⁵⁶ Patients with MUS are often well suited to this because of a high incidence of depression, anxiety and psychosocial problems.^{45,56}

Research on collaborative care for MUS has been promising. A psychiatrist's letter listing treatment recommendations for MUS patients (a simple list of dos and don'ts) showed improved patient physical functioning and decreased medical costs for the following year.^{49,99-101} This 'consultation letter' told GPs that their patient met criteria for somatisation disorder and described its chronic relapsing course. It encouraged them to avoid telling the patient 'It's all in your head'; to schedule regular brief appointments every four to six weeks rather than 'as needed'; and to conduct a focal physical examination at each visit. It also suggested that the symptoms were an expression of unconscious process.¹⁰¹

Collaborative care provided by specially trained nurse practitioners (NPs) for high-utilising patients with MUS led to improvement.⁵³ The NPs used a stepped approach that included 12 20-minute visits over a year (plus telephone contact) and provided antidepressants, reduction/elimination of substance abuse and ineffective narcotics, exercise, relaxation training, physical therapy and management of organic disease. In another study, a one-time, one-hour reflecting interview conducted by a

mental health clinician, a primary care physician and the patient resulted in reduced healthcare costs.¹⁰² The reflecting interview included: 1) curiosity about symptoms and empathic listening; 2) opportunities to reinterpret the symptoms and decision-making process; and 3) the construction of a family genogram to identify maladaptive relationship patterns.

Family considerations

As with most health problems, family members are on the front line of caring for patients with MUS. Family members are affected by the illness and, in turn, have an effect on the patient and the illness. Although little research has been done on family relationships and MUS, some data are beginning to emerge. Adult patients with somatisation disorder reported significantly higher levels of family conflict and significantly lower levels of family cohesion, which is characterised by frequent arguments, emotional distance and poor support.¹⁰³ Conflict and distance probably exist in a demand-withdraw interactional pattern: patient attention-seeking behaviour is associated with partner withdrawal and partner attention providing is associated with patient withdrawal.¹⁰⁴ A common trap that family members encounter is blaming the patient with MUS for faking symptoms or being weak, which may create significant tension in the relationship. Education for family members that links psychological and physical processes will help family members better understand the patient and potentially decrease misunderstanding and conflict.⁵⁷

In addition to doctors being helpful to family members, the family can be helpful to doctors. When family members are present in treatment, doctors can directly observe a significant context for the illness – organisational patterns (e.g. roles, rules), communication and illness beliefs in the family.¹⁰⁵ For example, family members frequently have strong beliefs about the cause of MUS and the role of health professionals in treating MUS. In addition, family members can provide a wealth of information to the healthcare team about what exacerbates or improves symptoms.¹⁰⁶ If family involvement is not possible, it is still helpful to inquire about the family in treatment, both currently and historically, particular with patients from non-western cultures who place more value on the family than the individual.

Cultural considerations

Comprehensive assessment and treatment of MUS includes a consideration of the patient's culture. Although a full discussion of culture and MUS is beyond the scope of this paper, it must be acknowledged that patients and families who come from particular cultural traditions may link social conditions, such as social conflict, with physical symptoms.^{107,108} Illness narratives have become a way of understanding the cultural context of MUS.

Illness narratives refer to a form of storytelling that connects physical symptoms with the psychological, social or cultural context of these symptoms.³⁴ Different cultures tend toward different common illness narratives.^{34,108} For example, many West Indian (Caribbean) immigrants to Canada attribute their MUS to chronic overwork and the irregularity of daily living, citing symptoms such as gas, dizziness, fatigue, joint pain and muscle tension.¹⁰⁹ Patients from Korea may explain their MUS as *hwa-byung*, a syndrome of both somatic and depressive symptoms, commonly attributed to suppressed anger or rage.¹⁰⁸ The coherence of a patient's illness narrative is a key indicator of whether or not a particular patient develops MUS after experiencing a trauma.³⁴ The elicitation of illness narratives is a way of understanding MUS in culturally diverse populations, as conventional western attributions of these symptoms to anxiety and mood disorders are insufficient for understanding the experiences of many MUS patients or communicating with these patients and their families.

Gaps in the literature

Most clinicians will probably struggle to apply the lessons from the empirical literature to individual patients. For example, important details of the interpersonal aspects of caring for MUS patients may be challenging to convey in print. Reattribution shows promise, but developing skills in linking psychosocial issues with symptoms in an individual patient will probably require sustained interest, experience and possibly a knowledgeable mentor. Another example is the lack of information addressing the common clinical dilemma of patients with MUS and multiple vegetative symptoms of depression who specifically deny feeling depressed, down or hopeless.

Another difficulty in applying the literature to the full range of MUS patients is that most studies compare usual care with treatment provided to

patients who accept referral to mental health services. This is a small subset of the full MUS population. In addition, a study comparing CBT with structured care (offering the same duration and frequency of attention from a clinician but without formal mental health treatment) showed no difference in outcomes.⁴⁹ More complexity results from variation in the definition of CBT between centres.⁵¹

Rendering the clinician's task even more challenging, several key areas are not well represented in the literature. For example, characteristics of MUS patients who are most likely to respond to CBT or other forms of treatment are poorly defined. Information about long-term outcomes following treatment of MUS is lacking in most studies. The frequent association between MUS and adverse childhood experience is often noted in published studies but the diagnostic and therapeutic value of uncovering this history in individuals is not. Another example is that of post-traumatic stress disorder which is common (lifetime prevalence of 5–10%) but its presentation with a somatic chief complaint is often unmentioned in published studies of MUS. Although we expect the biopsychosocial model to remain fundamental to our approach to MUS, further study of these issues will expand our understanding of the interaction of biological and behavioural factors.

Conclusion

No single approach will effectively treat all patients with MUS in primary care. Chronic, high-utilising patients with MUS need care that is both patient centered and attentive to their biopsychosocial needs. Careful assessment of the following provides a good foundation for treatment: psychological concerns, family and cultural issues, a history of a dysfunctional childhood and symptoms of depression, anxiety and PTSD. This can be followed with confirmation that symptoms are real even when linked to psychosocial stress.

The evaluation should clarify the most appropriate treatment options for the individual MUS patient, which includes reattribution, progressive muscle relaxation and related techniques, CBT (group or individual, by the GP or mental health clinician) or medication. Antidepressants are useful in the primary care setting for those patients who present with MUS associated with depressive illness and in such cases it is important to prescribe a full dose of antidepressants. MUS patients who do not fulfil the diagnostic criteria for depression but complain of insomnia and pain may respond to treatment with low dose antidepressant medication. Benzodiazepines

are generally not useful in the treatment of MUS in primary care.

For clinicians faced with these patients, finding a way to help is often a daunting task, requiring a considerable degree of patience and empathic communication. While multiple methods and elements within these methods are available for any given patient, this territory is relatively unfamiliar, if not uncharted, compared with organic medical problems. The time taken to develop one's own clinical approach can contribute powerfully to the welfare of patients and their family members, as well as to the GP's own personal and professional growth.

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CONFLICTS OF INTEREST

None.

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